



BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL SERVICES

Certified Mail No.

Activity No.: PER20080010
Agency Interest No. 2083

Sarah Thigpen
Responsible Care Leader
Union Carbide Corporation
Taft / Star Manufacturing Complex
P. O. Box 50
Hahnville, LA 70057

RE: Part 70 Operating Permit, Union Carbide Corp - St Charles Operations - LP-3 Polyethylene Unit,
Union Carbide Corp, Taft St. Charles Parish, Louisiana

Dear Ms. Thigpen:

This is to inform you that the permit renewal/modification for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 Operating Permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the _____ of _____, 2014, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and agency interest number cited above should be referenced in future correspondence regarding this facility.

Please be advised that pursuant to provisions of the Environmental Quality Act and the Administrative Procedure Act, the Department may initiate review of a permit during its term. However, before it takes any action to modify, suspend or revoke a permit, the Department shall, in accordance with applicable statutes and regulations, notify the permittee by mail of the facts or operational conduct that warrant the intended action and provide the permittee with the opportunity to demonstrate compliance with all lawful requirements for the retention of the effective permit.

Done this _____ day of _____, 2009.

Permit No.: 2350-V4

Sincerely,

Cheryl Sonnier Nolan
Assistant Secretary

CSN:LND
c: EPA Region VI

**AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Union Carbide Corp - St Charles Operations
Agency Interest No.: 2083
Union Carbide Corp
Taft St. Charles Parish, Louisiana**

I. Background

Union Carbide Corporation (UCC), a subsidiary of the Dow Chemical Company, operates Taft/Star Manufacturing Complex, an existing chemical manufacturing facility that began operation prior to 1969. The Union Carbide Corp - St Charles Operations currently operates the LP-3 Polyethylene Unit under Permit No. 2350-V3, issued December 30, 2003.

This is the Part 70 operating permit for the facility.

II. Origin

A permit application and Emission Inventory Questionnaire were submitted by Union Carbide Corp on June 30, 2008 requesting a Part 70 operating permit. An updated application dated April 6, 2009, and additional information dated May 8, 2009 was also received.

III. Description

In the Union Carbide low pressure polyethylene process, ethylene and an alpha-olefin comonomer are copolymerized in the presence of a proprietary catalyst to produce polymers having the desired melt indices, densities, and molecular weight distributions. Monomers are fed continuously into a fluidized-bed reactor. Before entering the reactor, the monomers are subjected to impurity removal to protect the catalyst against impurities that could poison it. The catalyst, which is prepared on site from a specific formulation of materials, is added separately.

The fluidized-bed in the reactor is made up of granular polyethylene polymer product of the polymerization reactions. Circulated up through the bed, the gas stream passes out of the reactor through an enlarged top section designed to disengage most of the fine particles. It then goes to a recycle compressor and through an external cooler before returning to the reactor.

Dry, free-flowing solid product is removed intermittently from the continuously growing bed through a discharge system in such a way as to keep the volume of the bed approximately constant. The reactor pressure is controlled at low pressures.

Although most of the unreacted monomers are recovered and recycled, some residual hydrocarbons are purged from the granular product so that it can be safely air conveyed. As a final process step, the material form is changed from granular to cylindrical pellet by forming a polymer melt and forcing the melt through an underwater cutter while adding one or more proprietary additives to the product before it is stored or shipped. Pelletized materials are transferred to the loading area for shipment offsite as a commercial product.

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With this permit renewal/renewal, UCC is requesting the following updates.

- UCC has determined that the 40 CFR 64 Compliance Assurance Monitoring (CAM) regulations do not apply to LP-3 emission units. Based on updated interpretation of the CAM rule, CAM applicability was incorrectly assigned to the dust collectors. As such, LP-3 Plant has no emissions units that are subject to CAM regulations. In fact, the LP-3 pollutant specific emission units (PSEUs) are either vented to equipment that do not qualify as a control device under CAM, or vented to a flare subject to continuous monitoring under NSPS Subpart A and therefore exempt from CAM.
- GC XVII Activity, torch used to burn off VOCs off melt pump, was determined to meet the requirements of LAC 33:III.501.B.5.B.3 and has been removed from the GC XVII list.
- GC XVII Activity, Reactors/Start-ups and Shutdowns, is currently being counted in the flare activities (Emission Point 1022) and has been removed from the GC XVII list.
- GC XVII Activity, Filter Inspection/ Change-out, was moved from the insignificant activity list and added to the list of GC XVII activities.
- GC XVII Activity, Transloading of Hopper Cars to Hopper Trucks, was moved from the insignificant activity list and added to the list of GC XVII activities.
- N-Hexane, and Toluene emissions have been removed from Emission Point 1012. Additionally, HCl emissions have been removed as well since the emissions are below the <0.0005 TPY criteria.
- N-Hexane is no longer part of the process and has been removed from the following Emission Points 1014, 1015, 1022, 1036, 1053, 1054, and 1076, at the LP-3 Plant.
- UCC is correcting the PM₁₀ emissions from Emissions Points 1016 and 1017, to 0.02 TPY. The emissions were incorrectly included as 0.03 TPY in the previous application.
- Emission Point 1032: A process stream was added into the calculation that was inadvertently left out of the previous calculation. This change is a reconciliation to reflect existing knowledge of existing plant operations.
- Emission Points 1042/1043, 1055/1056 – Operating hours were increased from 8,000 to 8760 hours/yr. This change is a reconciliation to reflect existing knowledge of existing plant operations. Emission changes will be reflected in the Unloading CAP.
- Zinc is being removed from the PM₁₀ speciation at Emission Points 1052, 1053, 1054, 1057, 1063, 1064, and 1072.
- Emission Point 1067 has been included in the proposed Loading CAP
- Emission Point 1069 has been decommissioned.
- Emission Points 1053/ 1054 currently permitted under GFB Cap will now be included in proposed Loading CAP.

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- Loading CAP - This is a proposed emission source which includes emission points 1028, 1029, 1030, 1031, 1053, 1054, and 1067.

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	27.55	28.60	1.05
SO ₂	0.16	0.16	-
NO _x	40.66	40.66	-
CO	214.75	214.75	-
VOC *	143.58	135.60	-7.98

***VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
Ethylene Glycol	0.60	0.26	-0.34
n-Hexane	19.32	-	-19.32
Toluene	<0.01	-	<0.01
Total	19.92	0.26	

Other VOC (TPY): 135.34

Non-VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
NH ₃	0.01	0.01	-
HCl	<0.01	-	<0.01
Zn (PM speciation)	0.10	-	-0.10
Total	0.11	0.01	

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IV. Type of Review

This permit was reviewed for compliance with 40 CFR 70, New Source Performance Standards (NSPS), and the Louisiana Air Quality Regulations. Prevention of Significant Deterioration (PSD), and National Emission Standards for Hazardous Air Pollutants (NESHAP) do not apply.

This facility is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

V. Credible Evidence

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

VI. Public Notice

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on XXXX XX, 2009, and in the <local paper>; <local town> on XXXX XX, 2009. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on XXXX XX, 2009. The draft permit was also submitted to US EPA Region VI on XXXX XX, 2009. All comments will be considered prior to the final permit decision.

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VII. Effects on Ambient Air

Emissions associated with the proposed modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

Dispersion Model(s) Used: None

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})
			—
			—

VIII. General Condition XVII Activities

Work Activity	Schedule	Emission Rates - tons				
		PM ₁₀	SO ₂	NO _x	CO	VOC
Sampling for quality control	12,000 samples/year					0.023
Solid loading and unloading when lines become plugged.	12 occurrence /year	0.060				
Unloading Connection / Disconnection (From tank cars or tank trucks into bullets.)	1,095 tank cars/yr 60 tank trucks/yr					0.007
Filter Inspection/Change-out [25 bag houses (BH) & 14 sintered metal filters (SMF)]	4 occurrence/yr (BH) 2 occurrence/yr (SMF)	0.064				
Transloading of Hopper Cars to Hopper Trucks (Vendor owned trucks with 99.98% efficiency filters)	800 trucks/yr	0.001				
(Two) 671 hp Diesel Generators	216 hrs/year each	0.32	0.30	4.49	0.97	0.43
(Two) 475 hp Diesel Compressors	48 hrs/yr each	0.10	0.09	1.4	0.3	0.14

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IX. Insignificant Activities

ID No.:	Description	Citation
1070	Upper Additive Tank (C-7565) -- 8,500 gals	LAC 33:III.501.B.5.A.3
1071	Lower Additive Tank (C-7567) -- 8,500 gals	LAC 33:III.501.B.5.A.3
1073	Liquid Additive Tank (C-7224) -- 7,000 gals	LAC 33:III.501.B.5.A.3
1074	Ethylene Glycol Tank (C-4041) -- 500 gals	LAC 33:III.501.B.5.A.3
1075	Ethylene Glycol Tank (C-5504) -- 150 gals	LAC 33:III.501.B.5.A.2
-	Laboratory Solvent Usage	LAC 33:III.501.B.5.A.6

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:III.Chapter																	
		5▲	509	9	11	13	15	2103	2107	2111	2113	2115	2116*	2121	22	29*	51*	53*	56
AI-2083	UCC-Facility Wide			1	1	1				1						1	1	1	1
UNF 0012	LP-3 Polyethylene Unit			1													1		
EQT 0984	1001-Tank Farm Seal Pot Vent																		
RLP 1138	1005A - R-9 Dehydrator Charging Vent																		3
RLP 1139	1005B - R-9 Dehydrator Running Vent																		3
RLP 1140	1006 - Dehydrator Blow Tank Vent																		3
RLP 1141	1007 - Reduction Blow Tank Vent																		3
RLP 1142	1008 - Catalyst Storage Bin Vent																		3
RLP 1143	1012 - Catalyst Deactivation Vent																		3
FUG 0021	1014 - No. 1 Compressor Seal Vent														1				3
FUG 0022	1015 - No. 2 Compressor Seal Vent														1				3
RLP 1144	1016 - No. 1 Reactor Bed Charging Vent																		3
RLP 1145	1017 - No. 2 Reactor Bed Charging Vent																		3
RLP 1146	1018 - No. 1 System Catalyst Feeder Reservoir Vent																		3
RLP 1147	1019 - No. 1 System Catalyst Feeder Reservoir Vent																		3
RLP 1148	1020 - No. 2 System Catalyst Feeder Reservoir Vent																		3

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ID No.:	Description	LAC 33:III:Chapter																		
		5▲	509	9	11	13	15	2103	2107	2111	2113	2115	2116*	2121	22	29*	51*	53*	56	59*
RLP 1149	1021 - No. 2 System Catalyst Feeder Reservoir Vent																			3
EQT 0986	1022-Blowdown Flare													1						1
RLP 1150	1026 - No. 1 Gas Barrier Vent																			3
RLP 1151	1027 - No. 2 Gas Barrier Vent																			3
RLP 1152	1028 - No. 1 Transition Bin Vent																			3
RLP 1153	1029 - No. 2 Transition Bin Vent																			3
RLP 1154	1030 - No. 1 Loading Bin Vent																			3
RLP 1155	1031 - No. 2 Loading Bin Vent																			3
RLP 1156	1032 - Off Grade Loading Bin Vent																			3
RLP 1157	1035 - Transloading Vent																			3
FUG 0023	1036 - Fugitive Emissions													1						1
RLP 1158	1039 - Hopper Truck Loading Vent																			3
RLP 1159	1042 - No. 1 Unloading System Vent													1						3
RLP 1160	1043 - No. 2 Unloading System Vent													1						3
RLP 1161	1046 - No. 1 Hopper Car Vent													1						3
RLP 1162	1047 - No. 2 Hopper Car Vent													1						3
RLP 1163	1052 - Additive Unloading Vent													1						3

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:II:Chapter																		
		5▲	509	9	11	13	15	2103	2107	2111	2113	2115	2116*	2121	22	29*	51*	53*	56	59*
RLP 1164	1053 - No. 1 Feed Bin Vent																			3
RLP 1165	1054 - No. 2 Feed Bin Vent																			3
RLP 1166	1055 - No. 1 Trim Bin Vent																			3
RLP 1167	1056 - No. 2 Trim Bin Vent																			3
RLP 1168	1057 - No. 1 Additives Storage Bin Vent																			3
RLP 1169	1059 - No. 1 Storage Bin Vent A																			3
RLP 1170	1060 - No. 1 Storage Bin Vent B																			3
RLP 1171	1061 - No. 2 Storage Bin Vent A																			3
RLP 1172	1062 - No. 2 Storage Bin Vent B																			3
RLP 1173	1063 - No. 1 Mixer Vent																			3
RLP 1174	1064 - No. 2 Mixer Vent																			3
RLP 1175	1065 - No.1 Dyer Vent																			3
RLP 1199	1066 - No.2 Dyer Vent																			3
RLP 1200	1067 - Loading Bin Separator Vent																			3
RLP 1201	1068 - Catalyst Ingredient M charge Pot Vent																			3
RLP 1202	1072 - Additive Dust Collector																			3
RLP 1203	1076 - Analyzer Vent																			3

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ID No.:	Description	LAC 33:III:Chapter																		
		5▲	509	9	11	13	15	2103	2107	2111	2113	2115	2116*	2121	22	29*	51*	53*	56	59*
RLP 1204	1077 - Activator Blow Tank Vent																			3
RLP 1205	1078 - Activator Scrubber Vent																			1
RLP 1206	1079 - Intermediate Catalyst Storage Bins Vent																			3
RLP 1207	1080 - Catalyst Storage Bins Vent																			3
EQT 0988	1081-Isopentane recovery Vessel																			3
EQT 0989	1082 - TI Storage Tank																			3
RLP 1208	1083 - Secondary Activator Scrubber Vent																			1
RLP 1215	AV - Analyzer Vents																			
RLP 1209	BV 1 - Bin Vent 1																			
RLP 1210	BV 2 - Bin Vent 2																			
RLP 1211	BV 3 - Bin Vent 3																			
RLP 1212	BV 4 - Bin Vent 4																			
RLP 1213	BV 5 - Bin Vent 5																			
RLP 1214	BV 6 - Bin Vent 6																			
EQT 0990	C-1004 TEST - Molecular Sieve (C-1004)																			
EQT 0991	C-1005 - Molecular Sieve (C-1005)																			2
EQT 0992	C-1007 - Non-TAP Alkene Storage Bullet (C-1007)																			1

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ID No.:	Description	LAC 33:III:Chapter																		
		5▲	509	9	11	13	15	2103	2107	2111	2113	2115	2116*	2121	22	29*	51*	53*	56	59*
EQT 0993	C-1008 - Non-TAP Alkene Storage Bullet (C-1008)																			
EQT 0994	C-1010 - Molecular Sieve (C-1010)																			
EQT 0995	C-1027 - Column (C-1027)																			
EQT 1001	C-1401 - Non-TAP alkene Storage Tank (C-1401)																			
EQT 0997	C-1402 - Molecular Sieve (C-1402)																			
EQT 0998	C-1406 - Storage Bullet (C-1406)																			
EQT 1002	C-1409 - Non-TAP alkene Storage Tank (C-1409)																			
EQT 1000	C-1447 - Column (C-1447)																			
EQT 1003	C-1501 - Raw Material Storage Tank (C-1501)																			
EQT 1004	C-1505 - Disposal Tank (C-1505)																			
EQT 1005	C-1511 - Raw Material Storage Tank (C-1511)																			
EQT 1006	C-1512 - Raw Material Storage Tank (C-1512)																			
EQT 1007	C-1601 - Non-TAP VOC Storage Tank (C-1601)																			
EQT 1008	C-1603 - Non-TAP VOC Storage Tank (C-1603)																			
EQT 1009	C-2112 - Molecular Sieve (C-2112)																			
EQT 1010	C-2113 - Molecular Sieve (C-2113)																			
EQT 1011	C-2114 - Molecular Sieve (C-2114)																			

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ID No.:	Description	LAC 33 III. Chapter																	
		5▲	509	9	11	13	15	2103	2107	2111	2113	2115	2116*	2121	22	29*	51*	53*	56
EQT 1012	C-2120 - Molecular Sieve (C-2120)																		
EQT 1013	C-3120 - Non-TAP alkene Storage Tank (C-3120)																		
RLP 1216	C-3121 - Solution Vessel Vent (3121)																		
EQT 1014	C-3125 - Slop Tank (C-3125)																		
EQT 1015	C-3143 - Isopentane Dyer (C-3143)																		
RLP 1217	C-3150 - Vessel Vent (3150)																		
RLP 1218	C-3160 - Reduction Vessel Vent (3160)																		
RLP 1219	C-3166 - Metering Pot Vent (3166)																		
RLP 1220	C-3167 - Charge Pot Vent (3167)																		
RLP 1221	C-3190 - Vessel Vent (3190)																		
EQT 1016	C-3197R - Raw Material Storage Tank (C-3197R)																		
RLP 1222	C-4001 - Reactor Vent (C-4001)																		
RLP 1223	C-4301 - Reactor Vent (C-4301)																		
EQT 1017	C-4412 - Tank (C-4412)																		
EQT 1018	C-4417 - Tank (C-4417)																		
EQT 1019	C-5604 - Non TAP Alkane Storage Tank (C-5604)																		
RLP 1224	D-4045 - Seal Pot Vent (D-4045)																		

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ID No.:	Description	LAC 33:III. Chapter																		
		5▲	509	9	11	13	15	2103	2107	2111	2113	2115	2116*	2121	22	29*	51*	53*	56	59*
RLP 1225	SV 1 - Silo Vent 1																			
RLP 1226	SV 2 - Silo Vent 2																			
RLP 1227	SV 3 - Silo Vent 3																			

* The regulations indicated above are State Only regulations.

▲ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.C.6 citations, except when the requirement found in the "Specific Requirements" report specifically states that the regulation is State Only.

KEY TO MATRIX

- 1 - The regulations have applicable requirements that apply to this particular emission source.
 - The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 - The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 - The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.
 Blank - The regulations clearly do not apply to this type of emission source.

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ID No.:	Description	40 CFR 60 NSPS						40 CFR 61						40 CFR 63 NESHAP						40 CFR						
		A	Kb	D _b	D _c	D _D	KK	I _H	A	M	F _F	A	H	H	S _S	V _V	F _{FF}	F	GGG	G _G	G ₄	G ₈	G ₇₀	G ₈₂		
Site Wide .	UCC - St. Charles Operation								1	1	1								1	1	1	1	1	1	1	
UNF 0012	LP-3 Polyethylene Unit	1					1																			
EQT 0984	1001-Tank Farm Seal Pot Vent																									
RLP 1138	1005A - R-9 Dehydrator Charging Vent																									
RLP 1139	1005B - R-9 Dehydrator Running Vent																									
RLP 1140	1006 - Dehydrator Blow Tank Vent																									
RLP 1141	1007 - Reduction Blow Tank Vent																									
RLP 1142	1008 - Catalyst Storage Bin Vent																									
RLP 1143	1012 - Catalyst Deactivation Vent																									
FUG 0021	1014 - No.1 Compressor Seal Vent																									
FUG 0022	1015 - No 2 Compressor Seal Vent																									
RLP 1144	1016 - No. 1 Reactor Bed Charging Vent																									
RLP 1145	1017 - No. 2 Reactor Bed Charging Vent																									
RLP 1146	1018 - No. 1 System Catalyst Feeder Reservoir Vent																									
RLP 1147	1019 - No. 1 System Catalyst Feeder Reservoir Vent																									
RLP 1148	1020 - No. 2 System Catalyst Feeder Reservoir Vent																									

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ID No.:	Description	40 CFR 60 NSPS						40 CFR 61						40 CFR 63 NESHAP						40 CFR		
		A	Kb	Db	Dc	DD	KK	III	A	M	F	A	H	SS	V	FFF	GGG	GG	64	68	70	82
RLP 1149	1021 - No. 2 System Catalyst Feeder Reservoir Vent																					3
EQT 0986	1022-Blowdown Flare																					3
RLP 1150	1026 - No. 1 Gas Barrier Vent																					3
RLP 1151	1027 - No. 2 Gas Barrier Vent																					3
RLP 1152	1028 - No. 1 Transition Bin Vent																					3
RLP 1153	1029 - No. 2 Transition Bin Vent																					3
RLP 1154	1030 - No. 1 Loading Bin Vent																					3
RLP 1155	1031 - No. 2 Loading Bin Vent																					3
RLP 1156	1032 - Off Grade Loading Bin Vent																					3
RLP 1157	1035 - Transloading Vent																					3
FUG 0023	1036 - Fugitive Emissions																					3
RLP 1158	1039 - Hopper Truck Loading Vent																					3
RLP 1159	1042 - No. 1 Unloading System Vent																					3
RLP 1160	1043 - No. 2 Unloading System Vent																					3
RLP 1161	1046 - No. 1 Hopper Car Vent																					3
RLP 1162	1047 - No. 2 Hopper Car Vent																					3
RLP 1163	1052 - Additive Unloading Vent																					3

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations
 Agency Interest No.: 2083
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS				40 CFR 61				40 CFR 63 NESHAP				40 CFR				
		A	K _b	D _b	D _c	D _D	K _K	I _{III}	A	M	F _F	A	H _H	S _S	V _V	F _F	G _{GG}	G _{GG}
RLP 1164	1053 - No. 1 Feed Bin Vent																64	68
RLP 1165	1054 - No. 2 Feed Bin Vent																70	82
RLP 1166	1055 - No. 1 Trim Bin Vent																	3
RLP 1167	1056 - No. 2 Trim Bin Vent																	3
RLP 1168	1057 - No. 1 Additives Storage Bin Vent																	3
RLP 1169	1059 - No. 1 Storage Bin Vent A																	3
RLP 1170	1060 - No. 1 Storage Bin Vent B																	3
RLP 1171	1061 - No. 2 Storage Bin Vent A																	3
RLP 1172	1062 - No. 2 Storage Bin Vent B																	3
RLP 1173	1063 - No. 1 Mixer Vent																	3
RLP 1174	1064 - No. 2 Mixer Vent																	3
RLP 1175	1065 - No. 1 Dryer Vent																	3
RLP 1199	1066 - No. 2 Dryer Vent																	3
RLP 1200	1067 - Loading Bin Separator Vent																	3
RLP 1201	1068 - Catalyst Ingredient M Charge Pot Vent																	3
RLP 1202	1072 - Additive Dust Collector																	3
RLP 1203	1076 - Analyzer Vent																	3

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations
 Agency Interest No.: 2083
 Union Carbide Corp
 Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS				40 CFR 61				40 CFR 63 NESHAP				40 CFR								
		A	Kb	Db	Dc	DD	KK	III	A	M	FF	A	H	SS	VV	FFF	GGG	GG	64	68	70	82
RLP 1204	1077 - Activator Blow Tank Vent																					3
RLP 1205	1078 - Activator Scrubber Vent																					3
RLP 1206	1079 - Intermediate Catalyst Storage Bins Vent																					3
RLP 1207	1080 - Catalyst Storage Bins Vent																					3
EQT 0988	1081-Isopentane recovery Vessel	3																				
EQT 0989	1082 - TI Storage Tank		3																			
RLP 1208	1083 - Secondary Activator Scrubber Vent																					3
RLP 1215	AV - Analyzer Vents																					3
RLP 1209	BV 1 - Bin Vent 1																					
RLP 1210	BV 2 - Bin Vent 2																					
RLP 1211	BV 3 - Bin Vent 3																					
RLP 1212	BV 4 - Bin Vent 4																					
RLP 1213	BV 5 - Bin Vent 5																					
RLP 1214	BV 6 - Bin Vent 6																					
EQT 0990	C-1004 - TEST - Molecular Sieve (C-1004)																					
EQT 0991	C-1005 - Molecular Sieve (C-1005)																					
EQT 0992	C-1007 - Non-TAP Alkene Storage Bullet (C-1007)	3																				

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations
Agency Interest No.: 2083
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS				40 CFR 61				40 CFR 63 NESHAP				40 CFR										
		A	Kb	D _b	D _c	D _D	D _D	KK	III	A	M	FF	A	H	SS	VV	FFF	GGG	F	GG	64	68	70	82
EQT 0993	C-1008 - Non-TAP Alkene Storage Bullet (C-1008)																							
EQT 0994	C-1010 - Molecular Sieve (C-1010)																							
EQT 0995	C-1027 - Column (C-1027)																							
EQT 1001	C-1401 - Non-TAP alkene Storage Tank (C-1401)																							
EQT 0997	C-1402 - Molecular Sieve (C-1402)																							
EQT 0998	C-1406 - Storage Bullet (C-1406)																							
EQT 1002	C-1409 - Non-TAP alkene Storage Tank (C-1409)																							
EQT 1000	C-1447 - Column (C-1447)																							
EQT 1003	C-1501 - Raw Material Storage Tank (C-1501)																							
EQT 1004	C-1505 - Disposal Tank (C-1505)																							
EQT 1005	C-1511 - Raw Material Storage Tank (C-1511)																							
EQT 1006	C-1512 - Raw Material Storage Tank (C-1512)																							
EQT 1007	C-1601 - Non-TAP VOC Storage Tank (C-1601)																							
EQT 1008	C-1603 - Non-TAP VOC Storage Tank (C-1603)																							
EQT 1009	C-2112 - Molecular Sieve (C-2112)																							
EQT 1010	C-2113 - Molecular Sieve (C-2113)																							
EQT 1011	C-2114 - Molecular Sieve (C-2114)																							

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations
Agency Interest No.: 2083
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS			40 CFR 61			40 CFR 63 NESHAP			40 CFR						
		A	K _b	D _b	D _c	D _D	K _K	III	A	M	F _F	A	H _H	SS	V _V	F _{FFF}	G _{GG}
EQT 1012	C-2120 - Molecular Sieve (C-2120)																
EQT 1013	C-3120 - Non-TAP alkene Storage Tank (C-3120)																
RLP 1216	C-3121 - Solution Vessel Vent (3121)																
EQT 1014	C-3125 - Slop Tank (C-3125)																
EQT 1015	C-3143 - Isopentane Dryer (C-3143)																
RLP 1217	C-3150 - Vessel Vent (3150)																
RLP 1218	C-3160 - Reduction Vessel Vent (3160)																
RLP 1219	C-3166 - Metering Pot Vent (3166)																
RLP 1220	C-3167 - Charge Pot Vent (3167)																
RLP 1221	C-3190 - Vessel Vent (3190)																
EQT 1016	C-3197R - Raw Material Storage Tank (C-3197R)																
RLP 1222	C-4001 - Reactor Vent (C-4001)																
RLP 1223	C-4301 - Reactor Vent (C-4301)																
EQT 1017	C-4412 - Tank (C-4412)																
EQT 1018	C-4417 - Tank (C-4417)																
EQT 1019	C-5604 - Non TAP Alkane Storage Tank (C-5604)																
RLP 1224	D-4045 - Seal Pot Vent (D-4045)																

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations
Agency Interest No.: 2083
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

KEY TO MATRIX

- 1 - The regulations have applicable requirements that apply to this particular emission source.
 - 2 - The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
 - 3 - The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
 - 4 - The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank – The regulations clearly do not apply to this type of emission source.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations
Agency Interest No.: 2083
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
LP-3	NESHAP Part 63 Subpart F – Organic Hazardous Pollutants from Synthetic Organic Chemical Manufacturing Industry [40 CFR 63.100]	Does not apply. This Unit does not manufacture a product listed in table 1 of this subpart.
	NESHAP Subpart FFFF - Miscellaneous Organic Chemical Manufacturing (MON) [40 CFR 63.2435(b)(2)]	Does not apply. Plant does not process, use or produce any of the organic HAPS listed in section 112(b) of the CAA or hydrogen halide or halogen HAPs defined in 40 CFR 63.2550
	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	Does not apply. There are no emission units that meet the criteria specified in 40 CFR 64.2(a).

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations
 Agency Interest No.: 2083
Union Carbide Corp
 Taft, St. Charles Parish, Louisiana

XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
1006, 1007, 1008, 1016, 1017, 1018, 1019, 1020, 1021, 1030, 1031, 1032, 1046, 1047, 1065, 1066, 1068, 1069, 1077, 1079, 1080	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:II .51(9)] State-Only	Does not apply. Emissions points do not emit TAPs.
1005A, 1005B, 1026, 1027, 1028, 1029, 1035, 1039, 1042, 1043, 1055, 1056, 1059, 1060, 1061, 1062, 1067, (Dust Collectors) 1012, 1014, 1015, 1076 Vents	NSPS Subpart DDD-Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry [40 CFR 60.562-2]	Exempt per 40 CFR 60.560(a)(4)(i).
1036 - Fugitives		
1081, 1082, C-1512, C-1603, C-3197R, C-4417, C-5604 Tanks	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b(a)]	Does not apply. Tanks capacities less than 75 m ³ (19,813 gals).

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - St Charles Operations
Agency Interest No.: 2083
Union Carbide Corp
Taft, St. Charles Parish, Louisiana

XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
C-1007, C-1008, C-1401, C-1501, C-1505, C-1511, C-1601, C-3120, C-3125, C-3197R Tanks	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b(a)]	Does not apply. Tanks were not constructed, reconstructed, or modified after July 23, 1984.
C-3143 Dryer	NSPS Subpart DDD-Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry [40 CFR 60.562-1]	Exempt. The dryer (C-3143) is exempt from control requirements per 40 CFR 60.560(g). (Uncontrolled emissions are less than 1.6 Mg/yr.)

The above table provides explanation for both the exemption status or non-applicability of a source cited by 1, 2 or 3 in the matrix presented in Section X (Table 1) of this permit.

INVENTORIES

AJ ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air - Title V Regular Permit Renewal

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
Polyethylene Plant						
EQT 0984	1001 - Tank Farm Seal Pot Vent	350 gallons	1767.6 MM BTU/hr	136.5 MM BTU/hr		8760 hr/yr
EQT 0986	1022 - Blowdown Flare	2000 gallons				8760 hr/yr
EQT 0988	1081 - Isopentane Recovery Vessel	8000 gallons				8760 hr/yr
EQT 0989	1082 - TI Storage Tank					8760 hr/yr
EQT 0990	C-1004 - Molecular Sieve (C-1004)					8760 hr/yr
EQT 0991	C-1005 - Molecular Sieve (C-1005)					8760 hr/yr
EQT 0992	C-1007 - Non-TAP Alkene Storage Bullet (C-1007)	177461 gallons				8760 hr/yr
EQT 0993	C-1008 - Non-TAP Alkene Storage Bullet (C-1008)	69585 gallons				8760 hr/yr
EQT 0994	C-1010 - Molecular Sieve (C-1010)					8760 hr/yr
EQT 0995	C-1027 - Column (C-1027)					8760 hr/yr
EQT 0997	C-1402 - Molecular Sieve (C-1402)					8760 hr/yr
EQT 0998	C-1406 - Storage Bullet (C-1406)	66000 gallons				8760 hr/yr
EQT 1000	C-1447 - Column (C-1447)					8760 hr/yr
EQT 1001	C-1401 - Non-TAP Alkene Storage Tank (C-1401)	22363 gallons				8760 hr/yr
EQT 1002	C-1409 - Non-TAP Alkene Storage Tank (C-1409)	33000 gallons				8760 hr/yr
EQT 1003	C-1501 - Raw Material Storage Tank (C-1501)	18100 gallons				8760 hr/yr
EQT 1004	C-1505 - Disposal Tank (C-1505)	839 gallons				8760 hr/yr
EQT 1005	C-1511 - Raw Material Storage Tank (C-1511)	16149 gallons				8760 hr/yr
EQT 1006	C-1512 - Raw Material Storage Tank (C-1512)	15697 gallons				8760 hr/yr
EQT 1007	C-1601 - Non-TAP VOC Storage Tank (C-1601)	825 gallons				8760 hr/yr
EQT 1008	C-1603 - Non-TAP VOC Storage Tank (C-1603)	60000 gallons				8760 hr/yr
EQT 1009	C-2112 - Molecular Sieve (C-2112)					8760 hr/yr
EQT 1010	C-2113 - Molecular Sieve (C-2113)					8760 hr/yr
EQT 1011	C-2114 - Molecular Sieve (C-2114)					8760 hr/yr
EQT 1012	C-2120 - Molecular Sieve (C-2120)					8760 hr/yr
EQT 1013	C-3120 - Non-TAP Alkene Storage Tank (C-3120)	2150 gallons				8760 hr/yr
EQT 1014	C-3125 - Stop Tank (C-3125)	2636 gallons				8760 hr/yr
EQT 1015	C-3143 - Isopentane Dryer (C-3143)					8760 hr/yr
EQT 1016	C-3197R - Raw Material Storage Tank (C-3197R)	984 gallons				8760 hr/yr
EQT 1017	C-4412 - Tank (C-4412)	gallons				8760 hr/yr
EQT 1018	C-4417 - Tank (C-4417)	16211 gallons				8760 hr/yr
EQT 1019	C-5604 - Non TAP Alkane Storage Tank (C-5604)	317 gallons				8760 hr/yr
FUG 0021	1014 - No.1 Compressor Seal Vent					8760 hr/yr
FUG 0022	1015 - No.2 Compressor Seal Vent					8760 hr/yr
FUG 0023	1036 - Fugitive Emissions					8760 hr/yr
RLP 1138	1005A - R-9 Dehydrator Charging Vent	200 ft^3/min	200 ft^3/min			8760 hr/yr
RLP 1139	1005B - R-9 Dehydrator Running Vent	200 ft^3/min	200 ft^3/min			8760 hr/yr
RLP 1140	1006 - Dehydrator Blow Tank Vent	2.4 ft^3/min	2.4 ft^3/min			500 hr/yr
RLP 1141	1007 - Reduction Blow Tank Vent	483 ft^3	2.4 ft^3/min			8760 hr/yr

INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350.V4
 Air - Title V Regular Permit Renewal

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
Polyethylene Plant						
RLP 1142	1008 - Catalyst Storage Bin Vent	3287 ft ³	57 ft ³ /min	57 ft ³ /min		8760 hr/yr
RLP 1143	1012 - Catalyst Deactivation Vent		420 batches/yr	420 batches/yr		8000 hr/yr
RLP 1144	1016 - No. 1 Reactor Bed Charging Vent		2000 ft ³ /min	2000 ft ³ /min		144 hr/yr
RLP 1145	1017 - No. 2 Reactor Bed Charging Vent		2000 ft ³ /min	2000 ft ³ /min		144 hr/yr
RLP 1146	1018 - No. 1 System Catalyst Feeder Reservoir Vent		270 (other units)	270 (other units)	times/year	90 hr/yr
RLP 1147	1019 - No. 1 System Catalyst Feeder Reservoir Vent		270 (other units)	270 (other units)	Times/year	90 hr/yr
RLP 1148	1020 - No. 2 System Catalyst Feeder Reservoir Vent		270 (other units)	270 (other units)	Times/year	90 hr/yr
RLP 1149	1021 - No. 2 System Catalyst Feeder Reservoir Vent		270 (other units)	270 (other units)	Times/year	90 hr/yr
RLP 1150	1026 - No. 1 Gas Barrier Vent		230 ft ³ /min (actual)	230 ft ³ /min (actual)		8760 hr/yr
RLP 1151	1027 - No. 2 Gas Barrier Vent		230 ft ³ /min (actual)	230 ft ³ /min (actual)		8760 hr/yr
RLP 1152	1028 - No. 1 Transition Bin Vent		9500 ft ³ /min	9500 ft ³ /min		8760 hr/yr
RLP 1153	1029 - No. 2 Transition Bin Vent		9500 ft ³ /min	9500 ft ³ /min		8760 hr/yr
RLP 1154	1030 - No. 1 Loading Bin Vent		251 ft ³ /min	251 ft ³ /min		8760 hr/yr
RLP 1155	1031 - No. 2 Loading Bin Vent		251 ft ³ /min	251 ft ³ /min		8760 hr/yr
RLP 1156	1032 - Off Grade Loading Bin Vent		4844 ft ³ /min	4844 ft ³ /min		200 hr/yr
RLP 1157	1035 - Transloading Vent		2350 ft ³ /min	2350 ft ³ /min		6000 hr/yr
RLP 1158	1039 - Hopper Truck Loading Vent		2000 ft ³ /min	2000 ft ³ /min		1600 hr/yr
RLP 1159	1042 - No. 1 Unloading System Vent		943 ft ³ /min	943 ft ³ /min		8760 hr/yr
RLP 1160	1043 - No. 2 Unloading System Vent		943 ft ³ /min	943 ft ³ /min		8760 hr/yr
RLP 1161	1046 - No. 1 Hopper Car Vent		1033 ft ³ /min	1033 ft ³ /min		200 hr/yr
RLP 1162	1047 - No. 2 Hopper Car Vent		1033 ft ³ /min	1033 ft ³ /min		200 hr/yr
RLP 1163	1052 - Additive Unloading Vent		150 ft ³ /min	150 ft ³ /min		8760 hr/yr
RLP 1164	1053 - No. 1 Feed Bin Vent		100000 lb/hr	68457 lb/hr		8760 hr/yr
RLP 1165	1054 - No. 2 Feed Bin Vent		10000 lb/hr	68496 lb/hr		8760 hr/yr
RLP 1166	1055 - No. 1 Trim Bin Vent		4844 ft ³ /min	4844 ft ³ /min		8760 hr/yr
RLP 1167	1056 - No. 2 Trim Bin Vent		4844 ft ³ /min	4844 ft ³ /min		8760 hr/yr
RLP 1168	1057 - No. 1 Additives Storage Bin Vent		61 ft ³ /min	61 ft ³ /min		4380 hr/yr
RLP 1169	1059 - No. 1 Storage Bin Vent A		895 ft ³ /min	895 ft ³ /min		8760 hr/yr
RLP 1170	1060 - No. 1 Storage Bin Vent B		895 ft ³ /min	895 ft ³ /min		8760 hr/yr
RLP 1171	1061 - No. 2 Storage Bin Vent A		895 ft ³ /min	895 ft ³ /min		8760 hr/yr
RLP 1172	1062 - No. 2 Storage Bin Vent B		895 ft ³ /min	895 ft ³ /min		8760 hr/yr
RLP 1173	1063 - No. 1 Mixer Vent		162 ft ³ /min	162 ft ³ /min		8760 hr/yr
RLP 1174	1064 - No. 2 Mixer Vent		72 ft ³ /min	72 ft ³ /min		8760 hr/yr
RLP 1175	1065 - No. 1 Dryer Vent		10000 ft ³ /min	10000 ft ³ /min		8760 hr/yr
RLP 1199	1066 - No. 2 Dryer Vent		10000 ft ³ /min	10000 ft ³ /min		8760 hr/yr
RLP 1200	1067 - Loading Bin Separator Vent		21688 ft ³ /min	21688 ft ³ /min		8760 hr/yr
RLP 1201	1068 - Catalyst Ingredient M Charge Pct Vent		.2 (other units)	.2 (other units)	grams/batch	500 hr/yr
RLP 1202	1072 - Additive Dust Collector		233 ft ³ /min	233 ft ³ /min		8760 hr/yr
RLP 1203	1076 - Analyzer Vent		.053 ft ³ /min	.053 ft ³ /min		8760 hr/yr

INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air : Title V Regular Permit Renewal

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
Polyethylene Plant						
RLP 1204	1077 - Activator Blow Tank Vent		2460 ft^3/hr	2460 ft^3/hr		500 hr/yr
RLP 1205	1078 - Activator Scrubber Vent		4146 ft^3/hr	4146 ft^3/hr		5632 hr/yr
RLP 1206	1079 - Intermediate Catalyst Storage Bins Vent		5943 ft^3/hr	5943 ft^3/hr		250 hr/yr
RLP 1207	1080 - Catalyst Storage Bins Vent		3870 ft^3/hr	3870 ft^3/hr		458 hr/yr
RLP 1208	1083 - Secondary Activator Scrubber Vent		4146 ft^3/hr	4146 ft^3/hr		5632 hr/yr
RLP 1209	IBV 1 - Bin Vent 1					8760 hr/yr
RLP 1210	BV 2 - Bin Vent 2					8760 hr/yr
RLP 1211	BV 3 - Bin Vent 3					8760 hr/yr
RLP 1212	BV 4 - Bin Vent 4					8760 hr/yr
RLP 1213	BV 5 - Bin Vent 5					8760 hr/yr
RLP 1214	BV 6 - Bin Vent 6					8760 hr/yr
RLP 1215	AV - Analyzer Vents					8760 hr/yr
RLP 1216	C 3121 - Solution Vessel Vent (3121)					8760 hr/yr
RLP 1217	C 3150 - Vessel Vent (3150)					8760 hr/yr
RLP 1218	C 3160 - Reduction Vessel Vent (3160)					8760 hr/yr
RLP 1219	C 3166 - Melting Pot Vent (3166)					8760 hr/yr
RLP 1220	C 3167 - Change Pot Vent (3167)					8760 hr/yr
RLP 1221	C 3190 - Vessel Vent (3190)					8760 hr/yr
RLP 1222	C 4001 - Reactor Vent (C-4001)					8760 hr/yr
RLP 1223	C 4301 - Reactor Vent (C-4301)					8760 hr/yr
RLP 1224	D 4045 - Seal Pot Vent (D-4045)					8760 hr/yr
RLP 1225	SV 1 - Silo Vent 1					8760 hr/yr
RLP 1226	SV 2 - Silo Vent 2					8760 hr/yr
RLP 1227	SV 3 - Silo Vent 3					8760 hr/yr
Stack Information:						
ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)
Polyethylene Plant						
EQT 0986	1022 - Blowdown Flare			2.7		170
FUG 0021	1014 - No.1 Compressor Seal Vent	05	1	67		2000
FUG 0022	1015 - No.2 Compressor Seal Vent	05	1	67		77
RLP 1138	1005A - R-9 Dehydrator Charging Vent	147	200	17		40
RLP 1139	1005B - R-9 Dehydrator Running Vent	66	45	12		45
RLP 1140	1006 - Dehydrator Blow Tank Vent	0	2.4		20	1600
RLP 1141	1007 - Reduction Blow Tank Vent	2.85	57		20	400
RLP 1142	1008 - Catalyst Storage Bin Vent	83	57	12		15
						25
						80

INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350.V4
 Air - Title V Regular Permit Renewal

Stack Information:

ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
Polyethylene Plant							
RLP 1143	1012 - Catalyst Deactivation Vent	.44	30	.12		40	120
RLP 1144	1016 - No. 1 Reactor Bed Charging Vent	.61	2000	.83		110	77
RLP 1145	1017 - No. 2 Reactor Bed Charging Vent	.61	2000	.83		110	77
RLP 1146	1018 - No. 1 System Catalyst Feeder Reservoir Vent	.10	30	.25		50	77
RLP 1147	1019 - No. 1 System Catalyst Feeder Reservoir Vent	.10	30	.25		50	77
RLP 1148	1020 - No. 2 System Catalyst Feeder Reservoir Vent	.10	30	.25		50	77
RLP 1149	1021 - No. 2 System Catalyst Feeder Reservoir Vent	.10	30	.25		50	77
RLP 1150	1026 - No. 1 Gas Barrier Vent	.9	230	.75		55	150
RLP 1151	1027 - No. 2 Gas Barrier Vent	.9	230	.75		55	150
RLP 1152	1028 - No. 1 Transition Bin Vent	.40	4844	2		152	77
RLP 1153	1029 - No. 2 Transition Bin Vent	.40	4844	2		152	77
RLP 1154	1030 - No. 1 Loading Bin Vent	.2	251	2		152	131
RLP 1155	1031 - No. 2 Loading Bin Vent	.2	251	2		152	131
RLP 1156	1032 - Off Grade Loading Bin Vent	.40	4844	2		115	77
RLP 1157	1035 - Transloading Vent	.50	2350	1		15	77
RLP 1158	1039 - Hopper Truck Loading Vent	.61	2000	.83		30	77
RLP 1159	1042 - No. 1 Unloading System Vent	.190	975	.33		90	167
RLP 1160	1043 - No. 2 Unloading System Vent	.190	975	.33		90	190
RLP 1161	1046 - No. 1 Hopper Car Vent	.201	1033	.33		20	77
RLP 1162	1047 - No. 2 Hopper Car Vent	.201	1033	.33		20	77
RLP 1163	1052 - Additive Unloading Vent	.29	150	.33		40	77
RLP 1164	1053 - No. 1 Feed Bin Vent	.53	7654	.175		125	163
RLP 1165	1054 - No. 2 Feed Bin Vent	.53	7654	.175		125	163
RLP 1166	1055 - No. 1 Trim Bin Vent	.103	4844	1		115	77
RLP 1167	1056 - No. 2 Trim Bin Vent	.103	4844	1		115	77
RLP 1168	1057 - No. 1 Additives Storage Bin Vent	.21	61	.25		60	77
RLP 1169	1059 - No. 1 Storage Bin Vent A	.42	895	.67		76	77
RLP 1170	1050 - No. 1 Storage Bin Vent B	.42	895	.67		76	77
RLP 1171	1061 - No. 2 Storage Bin Vent A	.42	895	.67		76	77
RLP 1172	1062 - No. 2 Storage Bin Vent B	.115	1360	.5		70	77
RLP 1173	1063 - No. 1 Mixer Vent	.34	162	1		15	163
RLP 1174	1064 - No. 2 Mixer Vent	.6	72	.5		70	163

INVENTORIES

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 Air - Title V Regular Permit Renewal

Stack Information:

ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
Polyethylene Plant							
RLP 1175	1065 - No.1 Dryer Vent	122	10000		1.36	45	128
RLP 1199	1066 - No.2 Dryer Vent	122	10000		1.36	45	128
RLP 1200	1067 - Loading Bin Separator Vent	74	21688	2.5		40	77
RLP 1201	1068 - Catalyst Ingredient M charge Pot Vent	5000	226	.08		50	77
RLP 1202	1072 - Additive Dust Collector	20	233	5		70	77
RLP 1203	1076 - Analyzer Vent	2.6	53	.02		15	104
RLP 1204	1077 - Activator Blow Tank Vent	56	41	.13		17	70
RLP 1205	1078 - Activator Scrubber Vent	6.4	33.4	.33		65	70
RLP 1206	1079 - Intermediate Catalyst Storage Bins Vent	135	99.1	.13		33	70
RLP 1207	1080 - Catalyst Storage Bins Vent	87.6	64.5	.13		47	70
RLP 1208	1083 - Secondary Activator Scrubber Vent	6.4	33.4	.33		65	70

Relationships:

ID	Description	Relationship	ID	Description
CRG 0002	CFF - Control Fabric Filter	Controls emissions from	RLP 1163	1052 - Additive Unloading Vent
CRG 0002	CFF - Control Fabric Filter	Controls emissions from	RLP 1174	1064 - No. 2 Mixer Vent
CRG 0002	CFF - Control Fabric Filter	Controls emissions from	RLP 1200	1067 - Loading Bin Separator Vent
CRG 0002	CFF - Control Fabric Filter	Controls emissions from	RLP 1202	1072 - Additive Dust Collector
EQT 0988	1081 - Isopentane Recovery Vessel	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 0989	1082 - TI Storage Tank	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 0990	C-1004 - Molecular Sieve (C-1004)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 0991	C-1005 - Molecular Sieve (C-1005)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 0992	C-1007 - Non-TAP Aikene Storage Bullet (C-1007)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 0993	C-1008 - Non-TAP Aikene Storage Bullet (C-1008)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 0994	C-1010 - Molecular Sieve (C-1010)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 0995	C-1027 - Column (C-1027)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 0997	C-1402 - Molecular Sieve (C-1402)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 0998	C-1406 - Storage Bullet (C-1406)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1000	C-1447 - Column (C-1447)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1001	C-1401 - Non-TAP Aikene Storage Tank (C-1401)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1002	C-1409 - Non-TAP Aikene Storage Tank (C-1409)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1003	C-1501 - Raw Material Storage Tank (C-1501)	Vents to	EQT 0984	1001 - Tank Farm Seal Pot Vent
EQT 1004	C-1505 - Disposal Tank (C-1505)	Vents to	EQT 0984	1001 - Tank Farm Seal Pot Vent
EQT 1005	C-1511 - Raw Material Storage Tank (C-1511)	Vents to	EQT 0984	1001 - Tank Farm Seal Pot Vent

INVENTORIES
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Relationships:

ID	Description	Relationship	ID	Description
EQT 1006	C-1512 - Raw Material Storage Tank (C-1512)	Vents to	EQT 0984	1001 - Tank Farm Seal Pot Vent
EQT 1007	C-1601 - Non-TAP VOC Storage Tank (C-1601)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1008	C-1603 - Non-TAP VOC Storage Tank (C-1603)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1009	C-2112 - Molecular Sieve (C-2112)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1010	C-2113 - Molecular Sieve (C-2113)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1011	C-2114 - Molecular Sieve (C-2114)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1012	C-2120 - Molecular Sieve (C-2120)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1013	C-3120 - Non-TAP Alkene Storage Tank (C-3120)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1014	C-3125 - Slop Tank (C-3125)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1015	C-3143 - Isopentane Dryer (C-3143)	Vents to	EQT 0986	1022 - Blowdown Flare
EQT 1016	C-3197R - Raw Material Storage Tank (C-3197R)	Vents to	EQT 0984	1001 - Tank Farm Seal Pot Vent
EQT 1017	C-4412 - Tank (C-4412)	Vents to	EQT 0984	1001 - Tank Farm Seal Pot Vent
EQT 1018	C-4417 - Tank (C-4417)	Vents to	EQT 0984	1001 - Tank Farm Seal Pot Vent
EQT 1019	C-5604 - Non TAP Alkane Storage Tank (C-5604)	Vents to	EQT 0984	1001 - Tank Farm Seal Pot Vent
RLP 1209	BV 1 - Bin Vent 1	Vents to	RLP 1142	1008 - Catalyst Storage Bin Vent
RLP 1210	BV 2 - Bin Vent 2	Vents to	RLP 1142	1008 - Catalyst Storage Bin Vent
RLP 1211	BV 3 - Bin Vent 3	Vents to	RLP 1142	1008 - Catalyst Storage Bin Vent
RLP 1212	BV 4 - Bin Vent 4	Vents to	RLP 1142	1008 - Catalyst Storage Bin Vent
RLP 1213	BV 5 - Bin Vent 5	Vents to	RLP 1142	1008 - Catalyst Storage Bin Vent
RLP 1214	BV 6 - Bin Vent 6	Vents to	RLP 1142	1008 - Catalyst Storage Bin Vent
RLP 1215	AV - Analyzer Vents	Vents to	EQT 0986	1022 - Blowdown Flare
RLP 1216	C-3121 - Solution Vessel Vent (3121)	Vents to	EQT 0986	1022 - Blowdown Flare
RLP 1217	C-3150 - Vessel Vent (3150)	Vents to	EQT 0986	1022 - Blowdown Flare
RLP 1218	C-3160 - Reduction Vessel Vent (3160)	Vents to	EQT 0986	1022 - Blowdown Flare
RLP 1219	C-3166 - Metering Pot Vent (3166)	Vents to	EQT 0986	1022 - Blowdown Flare
RLP 1220	C-3167 - Charge Pot Vent (3167)	Vents to	EQT 0986	1022 - Blowdown Flare
RLP 1221	C-3190 - Vessel Vent (3190)	Vents to	EQT 0986	1022 - Blowdown Flare
RLP 1222	C-4001 - Reactor Vent (C-4001)	Vents to	EQT 0986	1022 - Blowdown Flare
RLP 1223	C-4301 - Reactor Vent (C-4301)	Vents to	EQT 0986	1022 - Blowdown Flare
RLP 1224	D-4045 - Seal Pot Vent (D-4045)	Vents to	EQT 0986	1022 - Blowdown Flare
RLP 1225	SV 1 - Silo Vent 1	Vents to	RLP 1207	1080 - Catalyst Storage Bins Vent
RLP 1226	SV 2 - Silo Vent 2	Vents to	RLP 1207	1080 - Catalyst Storage Bins Vent
RLP 1227	SV 3 - Silo Vent 3	Vents to	RLP 1207	1080 - Catalyst Storage Bins Vent

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AI ID: 2083 - Union Carbide Corp - St Charles Operations
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Subject Item Groups:

ID	Group Type	Group Description
CRG 0001	Common Requirements Group	MRF - Material Recovery Filters
CRG 0002	Common Requirements Group	CFF - Control Fabric Filter
CRG 0003	Common Requirements Group	LAC 33-III Chapter 13 - Emission Standards for PM Applicability (1311)
CRG 0004	Common Requirements Group	LAC 33-III Chapter 21 - Storage of VOCs (2103)
GRP 0011	Equipment Group	1005 CAP - R-9 Dehydrator Vent CAP
GRP 0158	Equipment Group	Unloading CAP - Unloading System Vent CAP
GRP 0159	Equipment Group	Hopper CAP - Hopper Car Vent CAP
GRP 0160	Equipment Group	Loading CAP - Loading System Vent CAP
GRP 0161	Equipment Group	TB CAP - Trim Bin Vent CAP
GRP 0162	Equipment Group	SB CAP - Storage Bin Vent CAP
GRP 0163	Equipment Group	Scrubber CAP - Activator Scrubber Vent CAP
UNF 0012	Unit or Facility Wide	LP-3 - Polyethylene Plant

Group Membership:

ID	Description	Member of Groups
EQT 0988	1081 - Isopentane Recovery Vessel	CRG0000000004
EQT 0989	1082 - TI Storage Tank	CRG0000000004
EQT 1001	C-1401 - Non-TAP Alkene Storage Tank (C-1401)	CRG0000000004
EQT 1003	C-1501 - Raw Material Storage Tank (C-1501)	CRG0000000004
EQT 1004	C-1505 - Disposal Tank (C-1505)	CRG0000000004
EQT 1005	C-1511 - Raw Material Storage Tank (C-1511)	CRG0000000004
EQT 1006	C-1512 - Raw Material Storage Tank (C-1512)	CRG0000000004
EQT 1007	C-1601 - Non-TAP VOC Storage Tank (C-1601)	CRG0000000004
EQT 1008	C-1603 - Non-TAP VOC Storage Tank (C-1603)	CRG0000000004
EQT 1013	C-3120 - Non-TAP Alkene Storage Tank (C-3120)	CRG0000000004
EQT 1014	C-3125 - Slop Tank (C-3125)	CRG0000000004
EQT 1016	C-3197R - Raw Material Storage Tank (C-3197R)	CRG0000000004
EQT 1018	C-4417 - Tank (C-4417)	CRG0000000004
EQT 1019	C-5604 - Non TAP Alkane Storage Tank (C-5604)	CRG0000000004
RLP 1138	1005A - R-9 Dehydrator Charging Vent	CRG0000000001, CRG0000000003, GRP0000000011
RLP 1139	1005B - R-9 Dehydrator Running Vent	CRG0000000001, CRG0000000003, GRP0000000011
RLP 1140	1006 - Dehydrator Blow Tank Vent	CRG0000000001, CRG0000000003
RLP 1141	1007 - Reduction Blow Tank Vent	CRG0000000001, CRG0000000003
RLP 1142	1008 - Catalyst Storage Bin Vent	CRG0000000001, CRG0000000003
RLP 1143	1012 - Catalyst Deactivation Vent	CRG0000000001, CRG0000000003
RLP 1144	1016 - No. 1 Reactor Bed Charging Vent	CRG0000000003
RLP 1145	1017 - No. 2 Reactor Bed Charging Vent	CRG0000000003
RLP 1146	1018 - No. 1 System Catalyst Feeder Reservoir Vent	CRG0000000001, CRG0000000003
RLP 1147	1019 - No. 1 System Catalyst Feeder Reservoir Vent	CRG0000000001, CRG0000000003

INVENTORIES
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Air - Title V Regular Permit Renewal

Group Membership:

Group Membership:	ID	Description	Member of Groups
	RLP 1148	1020 - No. 2 System Catalyst Feeder Reservoir Vent	CRG0000000001, CRG0000000003
	RLP 1149	1021 - No. 2 System Catalyst Feeder Reservoir Vent	CRG0000000001, CRG0000000003
	RLP 1150	1026 - No. 1 Gas Barrier Vent	CRG0000000001, CRG0000000003
	RLP 1151	1027 - No. 2 Gas Barrier Vent	CRG0000000001, CRG0000000003
	RLP 1152	1028 - No. 1 Transition Bin Vent	CRG0000000001, CRG0000000003, GRP0000000003, GRP00000000160
	RLP 1153	1029 - No. 2 Transition Bin Vent	CRG0000000001, CRG0000000003, GRP0000000003, GRP00000000160
	RLP 1154	1030 - No. 1 Loading Bin Vent	CRG0000000001, CRG0000000003, GRP0000000003, GRP00000000160
	RLP 1155	1031 - No. 2 Loading Bin Vent	CRG0000000001, CRG0000000003, GRP0000000003, GRP00000000160
	RLP 1156	1032 - Off Grade Loading Bin Vent	CRG0000000001, CRG0000000003
	RLP 1157	1035 - Transloading Vent	CRG0000000001, CRG0000000003
	RLP 1158	1039 - Hopper Truck Loading Vent	CRG0000000001, CRG0000000003
	RLP 1159	1042 - No. 1 Unloading System Vent	CRG0000000001, CRG0000000003, GRP00000000158, GRP00000000162
	RLP 1160	1043 - No. 2 Unloading System Vent	CRG0000000001, CRG0000000003, GRP00000000158, GRP00000000162
	RLP 1161	1046 - No. 1 Hopper Car Vent	CRG0000000003, GRP00000000159, GRP00000000162
	RLP 1162	1047 - No. 2 Hopper Car Vent	CRG0000000003, GRP00000000159, GRP00000000162
	RLP 1163	1052 - Additive Unloading Vent	CRG0000000002, CRG0000000003
	RLP 1164	1053 - No. 1 Feed Bin Vent	CRG0000000001, CRG0000000003, GRP00000000160
	RLP 1165	1054 - No. 2 Feed Bin Vent	CRG0000000001, CRG0000000003, GRP00000000160
	RLP 1166	1055 - No. 1 Trim Bin Vent	CRG0000000001, CRG0000000003, GRP00000000161
	RLP 1167	1056 - No. 2 Trim Bin Vent	CRG0000000001, CRG0000000003, GRP00000000161
	RLP 1168	1057 - No. 1 Additives Storage Bin Vent	CRG0000000001, CRG0000000003
	RLP 1169	1059 - No. 1 Storage Bin Vent A	CRG0000000001, CRG0000000003
	RLP 1170	1060 - No. 1 Storage Bin Vent B	CRG0000000001, CRG0000000003
	RLP 1171	1061 - No. 2 Storage Bin Vent A	CRG0000000001, CRG0000000003
	RLP 1172	1062 - No. 2 Storage Bin Vent B	CRG0000000001, CRG0000000003
	RLP 1173	1063 - No. 1 Mixer Vent	CRG0000000001, CRG0000000003
	RLP 1174	1064 - No. 2 Mixer Vent	CRG0000000002, CRG0000000003
	RLP 1175	1065 - No. 1 Dryer Vent	CRG0000000003
	RLP 1199	1066 - No. 2 Dryer Vent	CRG0000000002, CRG0000000003, GRP00000000160
	RLP 1200	1067 - Loading Bin Separator Vent	CRG0000000003
	RLP 1201	1068 - Catalyst Ingredient Mcharge Pot Vent	CRG0000000002, CRG0000000003
	RLP 1202	1072 - Additive Dust Collector	CRG0000000001, CRG0000000003
	RLP 1204	1077 - Activator Blow Tank Vent	CRG0000000003, GRP00000000163
	RLP 1205	1078 - Activator Scrubber Vent	CRG0000000001, CRG0000000003
	RLP 1206	1079 - Intermediate Catalyst Storage Bins Vent	CRG0000000001, CRG0000000003
	RLP 1207	1080 - Catalyst Storage Bins Vent	CRG0000000003, GRP00000000163
	RLP 1208	1083 - Secondary Activator Scrubber Vent	CRG0000000003, GRP00000000163

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group

INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
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 Air - Title V Regular Permit Renewal

Annual Maintenance Fee:

Fee Number		Air Contaminant Source	Multipiler	Units Of Measure
0550		0550 Polyethylene/Polypropylene Manufacture (Rated Capacity)	1200	MM lbs/yr

SIC Codes:

2821	Plastics materials and resins	AI 2083
2821	Plastics materials and resins	UNF 012

SPECIFIC REQUIREMENTS

AJ ID: 2083 - Union Carbide Corp - St Charles Operations
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AJ 2083 Site Wide - UCC - St. Charles Operations

- 1 [40 CFR 60.] All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A.
- 2 [40 CFR 61.145(b)(1)] Provide DEQ with written notice of intention to demolish or renovate prior to performing activities to which 40 CFR 61 Subpart M applies.
- 3 [40 CFR 61.148] Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable. Subpart M. [40 CFR 61.145(b)(1)] Do not install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. Subpart M.
- 4 [40 CFR 61.342(c)] Comply with the requirements of 40 CFR 61.342(c) through (h) no later than 90 days following the effective date, unless a waiver of compliance has been obtained under 40 CFR 61.11, or by the initial startup for a new source with an initial startup after the effective date. Subpart FF. [40 CFR 61.342(b)]
- 5 [40 CFR 61.342(c)(1)(i)] Waste streams containing benzene: Remove or destroy the benzene contained in the waste using a treatment process or wastewater treatment system that complies with the standards specified in 40 CFR 61.348. Subpart FF. [40 CFR 61.342(c)(1)(i)]
- 6 [40 CFR 61.355] Determine compliance with 40 CFR 61 Subpart FF using the test methods and procedures specified in 40 CFR 61.355(a) through (i), as applicable. Subpart FF.
- 7 [40 CFR 61.356] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 61.356(a) through (n), as applicable. Maintain each record in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified. Subpart FF.
- 8 [40 CFR 61.357(d)(2)] Submit report. Due annually beginning on the date that equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit updates to the information listed in 40 CFR 61.357(a)(1) through (a)(3) or, if the information in 40 CFR 61.357(a)(1) through (3) is not changed in the following year, a statement to that effect. Subpart FF. [40 CFR 61.357(d)(2)]
- 9 [40 CFR 61.357(d)(6)] Submit report. Due quarterly, beginning three months after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit a certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR 61 Subpart FF. Subpart FF. [40 CFR 61.357(d)(6)]
- 10 [40 CFR 61.357(d)(7)] Submit report. Due quarterly, beginning three months after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Include the information specified in 40 CFR 61.357(d)(7)(i) through (d)(7)(v). Subpart FF. [40 CFR 61.357(d)(7)]
- 11 [40 CFR 61.357(d)(8)] Submit report. Due annually, beginning one year after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit a report that summarizes all inspections required by 40 CFR 61.342 through 61.354 during which detectable emissions are measured or a problem that could result in benzene emissions is identified, including information about the repairs or corrective action taken. Subpart FF. [40 CFR 61.357(d)(8)]
- 12 [40 CFR 61.] All affected facilities shall comply with all applicable provisions in 40 CFR 61 Subpart A.
- 13 [40 CFR 63.1080-1097] Each ethylene production unit shall comply with NESHPAP Subpart FF for benzene waste streams. Subpart XX Applicable to Hydrocarbons Unit.
- 14 [40 CFR 63.1100-1114] Each ethylene production unit shall comply with the wastewater requirements of NESHPAP Subpart XX for ethylene manufacturing process unit waste stream. Subpart YY Applicable to Hydrocarbons Unit.

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AI 2083 Site Wide - UCC - St. Charles Operations

- 15 [40 CFR 63.1420-1439] Each applicable unit shall comply with NESHAP Subpart G for Group 2 process wastewater streams. Units shall comply with recordkeeping and reporting requirements of this subpart. Subpart PPP Applicable to Unit 8.
- 16 [40 CFR 63.7881(a)] When permittee conducts a site remediation, as defined in 40 CFR 63.7957, permittee shall comply with all applicable requirements of this subpart unless the site remediation is exempted under 40 CFR 63.7881(b) or (c). Subpart GGGG. [40 CFR 63.7881(a)] All affected facilities shall comply with all applicable provisions in 40 CFR 63 Subpart A, as delineated in Table xx of 40 CFR 63 Subpart xx.
- 17 [40 CFR 63.] Develop a management system to oversee the implementation of the risk management program elements. [40 CFR 68.15(a)]
- 18 [40 CFR 68.15(a)] Assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements. [40 CFR 68.15(b)]
- 19 [40 CFR 68.15(b)] Define the lines of authority through an organization chart or similar document when responsibility for implementing individual requirements of 40 CFR 68 is assigned to persons other than the person identified under 68.15(b). [40 CFR 68.15(c)]
- 20 [40 CFR 68.15(e)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the names or positions of the people, other than the person identified under 68.15(b), who are assigned responsibility for implementing individual requirements of 40 CFR 68. [40 CFR 68.15(c)]
- 22 [40 CFR 68.155] Provide in the RMP an executive summary that includes a brief description of the elements listed in 68.155(a) through (g).
- 23 [40 CFR 68.160] Complete a single registration form and include in the RMP. Cover all regulated substances handled in covered processes. Include in the registration the information specified in 68.160(b)(1) through (13).
- 24 [40 CFR 68.165] Submit in the RMP information the release scenarios specified in 68.165(a)(2). Include the data listed in 68.165(b)(1) through (13).
- 25 [40 CFR 68.168] Submit in the RMP the information provided in 68.42(b) on each accident covered by 68.42(a).
- 26 [40 CFR 68.175] Provide in the RMP the emergency response information listed in 68.180(a) through (p).
- 27 [40 CFR 68.180] Provide in the RMP a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete. [40 CFR 68.185(b)]
- 28 [40 CFR 68.185(b)] Submit revised registration to EPA. Due within six months after a stationary source is no longer subject to 40 CFR 68. Indicate that the stationary source is no longer covered. [40 CFR 68.190(c)]
- 29 [40 CFR 68.190(c)] Review and update the RMP as specified in 68.190(b) and submit it in a method and format to a central point specified by EPA prior to June 21, 1999.
- 30 [40 CFR 68.190] Maintain records supporting the implementation of 40 CFR 68 for five years unless otherwise provided.
- 31 [40 CFR 68.200] Use the endpoints specified in 68.22(a) through (g) for analyses of offsite consequences.
- 32 [40 CFR 68.22] Analyze the release scenarios in 68.25, as specified in 68.25(a) through (h).
- 33 [40 CFR 68.25] Identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes, as specified in 68.28(b) through (e).
- 34 [40 CFR 68.28] Estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a).

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AI 2083 Site Wide - UCC - St. Charles Operations

- 36 [40 CFR 68.33] List in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a).
- 37 [40 CFR 68.36(b)] Submit revised RMP: Due within six months after changes in processes, quantities stored or handled, or any other aspect of the stationary source increase or decrease the distance to the endpoint by a factor of two or more. [40 CFR 68.36(b)]
- 38 [40 CFR 68.36] Review and update the offsite consequence analyses at least once every five years. Complete a revised analysis within six months if changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more.
- 39 [40 CFR 68.39] Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain the records specified in 68.39(a) through (e) on the offsite consequence analyses.
- 40 [40 CFR 68.42] Include in the five-year accident history all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage. Include the information specified in 68.42(b)(1) through (10) for each accidental release.
- 41 [40 CFR 68.65(a)] Compile written process safety information, which includes information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process, before conducting any process hazard analysis required by 40 CFR 68. [40 CFR 68.65(a)]
- 42 [40 CFR 68.65(d)(2)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Document that equipment complies with recognized and generally accepted good engineering practices. [40 CFR 68.65(d)(2)]
- 43 [40 CFR 68.65(d)(3)] Determine that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner. [40 CFR 68.65(d)(3)]
- 44 [40 CFR 68.65(d)(3)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Document that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner. [40 CFR 68.65(d)(3)]
- 45 [40 CFR 68.67(e)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. [40 CFR 68.67(a)]
- 46 [40 CFR 68.67(a)] Determine the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. [40 CFR 68.67(a)]
- 47 [40 CFR 68.67(b)] Use one or more of the methodologies in Sec. 68.67(b)(1) through (b)(7) to determine and evaluate the hazards of the process being analyzed. [40 CFR 68.67(b)]
- 48 [40 CFR 68.67(d)] Use a team with expertise in engineering and process operations to perform the process hazard analysis. Include at least one employee who has experience and knowledge specific to the process being evaluated, and at least one employee who is knowledgeable in the specific process hazard analysis methodology being used. [40 CFR 68.67(d)]
- 49 [40 CFR 68.67(e)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the resolution of the recommendations of the team performing the process hazard analysis, and what actions are to be taken. [40 CFR 68.67(e)]

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- 50 [40 CFR 68.67(e)] Establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions. [40 CFR 68.67(e)]
- 51 [40 CFR 68.67(f)] Update and revalidate the process hazard analysis at least every five years after the completion of the initial process hazard analysis, to assure that the process hazard analysis is consistent with the current process. Use a team that meets the requirements in Sec. 68.67(d). [40 CFR 68.67(f)]
- 52 [40 CFR 68.67(g)] Retain process hazards analyses and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in Sec. 68.67(e), for the life of the process. [40 CFR 68.67(g)]
- 53 [40 CFR 68.69(a)] Develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information. Address steps for each operating phase, operating limits, safety and health considerations, and safety systems and their functions in the procedures. [40 CFR 68.69(a)]
- 54 [40 CFR 68.69(b)] Make operating procedures readily accessible to employees who work in or maintain a process. [40 CFR 68.69(b)]
- 55 [40 CFR 68.69(c)] Review operating procedures as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. Certify annually that these operating procedures are current and accurate. [40 CFR 68.69(c)]
- 56 [40 CFR 68.69(d)] Develop and implement safe work practices to provide for the control of hazards during specific operations. [40 CFR 68.69(d)]
- 57 [40 CFR 68.71(a)(1)] Train each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, in an overview of the process and in the operating procedures as specified in Sec. 68.69. Emphasize the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks. [40 CFR 68.71(a)(1)]
- 58 [40 CFR 68.71(b)] Provide refresher training at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. [40 CFR 68.71(b)]
- 59 [40 CFR 68.71(c)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Prepare a record which contains the identity of the employee, the date of training required by 40 CFR 68.71, and the means used to verify that the employee understood the training. [40 CFR 68.71(c)]
- 60 [40 CFR 68.71(c)] Ascertain that each employee involved in operating a process has received and understood the training required by Sec. 68.71. [40 CFR 68.71(c)]
- 61 [40 CFR 68.73(b)] Establish and implement written procedures to maintain the ongoing integrity of process equipment listed in Sec. 68.73(a). [40 CFR 68.73(b)]
- 62 [40 CFR 68.73(c)] Train each employee involved in maintaining the ongoing integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner. [40 CFR 68.73(c)]
- 63 [40 CFR 68.73(d)(4)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Document each inspection and test that has been performed on process equipment. Maintain records of the information specified in Sec. 68.73(d)(4). [40 CFR 68.73(d)(4)]
- 64 [40 CFR 68.73(d)] Perform inspections and tests following recognized and generally accepted good engineering practices on process equipment listed in 40 CFR 68.73(a). Make the frequency of inspections and tests consistent with applicable manufacturer's recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience. [40 CFR 68.73(d)]

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- Correct deficiencies in equipment that are outside acceptable limits before further use or in a safe and timely manner when necessary means are taken to assure safe operation. [40 CFR 68.73(e)]
- Assure that equipment as it is fabricated is suitable for the process application for which it will be used, in the construction of new plants and equipment. Perform appropriate checks and inspections to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions. Assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used. [40 CFR 68.73(f)]
- Inform employees involved in operating a process, and maintenance and contract employees whose job tasks will be affected, of a change in the process and train them in the change, prior to start-up of the process or affected part of the process. [40 CFR 68.75(c)]
- Update the process safety information required by Sec. 68.65 if a change covered by 68.75 results in a change in the process safety information. [40 CFR 68.75(d)]
- Update the operating procedures or practices required by Sec. 68.69 if a change covered by 68.75 results in a change in the operating procedures or practices. [40 CFR 68.75(e)]
- Establish and implement written procedures to manage changes to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process. Assure that the considerations specified in Sec. 68.75(b)(1) through (b)(5) are addressed prior to any change.
- Perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information. Safety review must confirm the information specified in Sec. 68.77(b)(1) through (b)(4) prior to the introduction of regulated substances to a process.
- Develop a report of the findings of the compliance audit required by 40 CFR 68.79(a). [40 CFR 68.79(c)]
- Determine an appropriate response to each of the findings of the compliance audit. [40 CFR 68.79(d)]
- Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected. [40 CFR 68.79(d)]
- Retain the two (2) most recent compliance audit reports. [40 CFR 68.79(e)]
- Conduct compliance audit: Due at least every three years. Certify compliance with the provisions of the prevention program to verify that procedures and practices developed under 40 CFR 68 are adequate and are being followed. Conduct compliance audit by at least one person knowledgeable in the process.
- Establish an incident investigation team consisting of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident. [40 CFR 68.81(c)]
- Establish a system to promptly address and resolve the incident report findings and recommendations. [40 CFR 68.81(e)]
- Equipment/operational data recordkeeping by electronic or hard copy continuously. Document resolutions and corrective actions of the incident report findings and recommendations. [40 CFR 68.81(e)]
- Conduct incident investigation: Due as promptly as possible, but not later than 48 hours following each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance.

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- 81 [40 CFR 68.81] Prepare a report at the conclusion of the incident investigation which includes, at a minimum, the information specified in 40 CFR 68.81(d)(1) through (5). Review the report with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable. Retain the incident investigation reports for five years.
- 82 [40 CFR 68.83(a)] Develop a written plan of action regarding the implementation of the employee participation required by 40 CFR 68. [40 CFR 68.83(a)]
- 83 [40 CFR 68.83(b)] Consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management. [40 CFR 68.83(b)]
- 84 [40 CFR 68.83(e)] Provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under 40 CFR 68. [40 CFR 68.83(c)]
- 85 [40 CFR 68.85] Issue a hot work permit for hot work operations conducted on or near a covered process. Document in the permit that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning the hot work operations; indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed. Keep permit on file until completion of the hot work operations.
- 86 [40 CFR 68.87(b)(1)] Obtain and evaluate information regarding the contract owner or operator's safety performance and programs, when selecting a contractor. [40 CFR 68.87(b)(1)]
- 87 [40 CFR 68.87(b)(2)] Inform contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process. [40 CFR 68.87(b)(2)]
- 88 [40 CFR 68.87(b)(3)] Explain to the contract owner or operator the applicable provisions of 40 CFR 68 Subpart E. [40 CFR 68.87(b)(3)]
- 89 [40 CFR 68.87(b)(4)] Develop and implement safe work practices consistent with Sec. 68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas. [40 CFR 68.87(b)(4)]
- 90 [40 CFR 68.87(b)(5)] Periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in 40 CFR 68.87(c). [40 CFR 68.87(b)(5)]
- 91 [40 CFR 68.95(a)] Develop and implement an emergency response program for the purpose of protecting public health and the environment. Include in the program the elements listed in 40 CFR 68.95(a)(1) through (4). [40 CFR 68.95(a)]
- 92 [40 CFR 68.95(e)] Coordinate the emergency response plan developed under 68.95(a)(1) with the community emergency response plan developed under 42 U.S.C. 11003. Upon request of the local emergency planning committee or emergency response officials, promptly provide information necessary for developing and implementing the community emergency response plan. [40 CFR 68.95(c)]
- 93 [40 CFR 82 Subpart F] Comply with the standards for recycling and emissions reductions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.
- 94 [LAC 33:III.1103] Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited.
- 95 [LAC 33:III.1109.B] Outdoor burning of waste material or other combustible material is prohibited.
- 96 [LAC 33:III.1303.B] Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensity an existing traffic hazard condition are prohibited.
- 97 [LAC 33:III.1305] Prevent particulate matter from becoming airborne by taking all reasonable precautions. These precautions shall include, but not be limited to, those specified in LAC 33:III.1305.A.1-7.

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- 98 [LAC 33:III.2113.A] Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5.
- Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
- Discharges of odorous substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited.
- If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in LAC 33:III.2901.G.
- Do not construct or modify any stationary source subject to any standard set forth in LAC 33:III.Chapter 51.Subchapter A without first obtaining written authorization from DEQ in accordance with LAC 33:III.Chapter 51.Subchapter A, after the effective date of the standard.
- Do not cause a violation of any ambient air standard listed in LAC 33:III.Table 51.2, unless operating in accordance with LAC 33:III.5109.B.
- Do not build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission that would otherwise constitute a violation of an applicable standard.
- Do not fail to keep records, notify, report or revise reports as required under LAC 33:III.Chapter 51.Subchapter A.
- Include a certification statement with the annual emission report and revisions to any emission report that attests that the information contained in the emission report is true, accurate, and complete, and that is signed by a responsible official, as defined in LAC 33:III.502.
- Include the full name of the responsible official, title, signature, date of signature and phone number of the responsible official.
- Submit Annual Emissions Report: Due annually, by the 31st of March unless otherwise directed by DEQ, to the Office of Environmental Assessment in a format specified by DEQ. Identify the quantity of emissions in the previous calendar year for any toxic air pollutant listed in Table 51.1 or Table 51.3.
- Submit notification: Due to the Department of Public Safety 24-hour Louisiana Emergency Hazardous Materials Hotline at (225) 925-6595 immediately, but in no case later than 1 hour, after any discharge of a toxic air pollutant into the atmosphere that results or threatens to result in an emergency condition (a condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water or air environment, or cause severe damage to property).
- Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, no later than 24 hours after the beginning of any unauthorized discharge into the atmosphere of a toxic air pollutant as a result of bypassing an emission control device, when the emission control bypass was not the result of an upset, and the quantity of the unauthorized bypass is greater than or equal to the lower of the Minimum Emission Rate (MER) in LAC 33:III.5112, Table 51.1, or a reportable quantity (RQ) in LAC 33:III.3931, or the quantity of the unauthorized bypass is greater than one pound and there is no MER or RQ for the substance in question. Submit notification in the manner provided in LAC 33:III.3923.
- Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, immediately, but in no case later than 24 hours after any unauthorized discharge of a toxic air pollutant into the atmosphere that does not cause an emergency condition, the rate or quantity of which is in excess of that allowed by permit, compliance schedule, or variance, or for upset events that exceed the reportable quantity in LAC 33:III.3931. Submit notification in the manner provided in LAC 33:III.3923.

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- 111 [LAC 33.III.5107.B.4] Submit written report: Due by certified mail to SPOC within seven calendar days of learning of any such discharge or equipment bypass as referred to in LAC 33.III.5107.B.1 through B.3. Include the information specified in LAC 33.III.5107.B.4.a.i through B.4.a.viii.
- Report all discharges to the atmosphere of a toxic air pollutant from a safety relief device, a line or vessel rupture, a sudden equipment failure, or a bypass of an emission control device, regardless of quantity, IF THEY CAN BE MEASURED AND CAN BE RELIABLY QUANTIFIED USING GOOD ENGINEERING PRACTICES, to DEQ along with the annual emissions report and where otherwise specified. Include the identity of the source, the date and time of the discharge, and the approximate total loss during the discharge.
- For toxic air pollutants emitted at rates equal to or greater than the minimum emission rate, determine the status of compliance, beyond the sources property line, with applicable ambient air standards listed in LAC 33.III.5112, table 51.2.
- Develop a standard operating procedure (SOP) within 120 days after achieving or demonstrating compliance with the standards specified in LAC 33.III. Chapter 51. Detail in the SOP all operating procedures or parameters established to ensure that compliance with the applicable standards is maintained and address operating procedures for any monitoring system in place, specifying procedures to ensure compliance with LAC 33.III.5113.C.5. Make a written copy of the SOP available on site or at an alternate approved location for inspection by DEQ. Provide a copy of the SOP within 30 days upon request by DEQ.
- Submit notification in writing: Due to SPOC not more than 60 days nor less than 30 days prior to initial start-up. Submit the anticipated date of the initial start-up.
- Submit notification in writing: Due to SPOC within 10 working days after the actual date of initial start-up of the source. Submit the actual date of initial start-up of the source.
- Comply with applicable monitoring requirements in LAC 33.III.5113.C.
- An individual or company contracted to perform a demolition or renovation activity which disturbs RACM must be recognized by the Licensing Board for Contractors to perform asbestos abatement, and shall meet the requirements of LAC 33.III.5151.F.2 and F.3 for each demolition or renovation activity.
- Activate the preplanned abatement strategy listed in LAC 33.III.5611. Table 5 when the administrative authority declares an Air Pollution Alert.
- Activate the preplanned strategy listed in LAC 33.III.5611. Table 6 when the administrative authority declares an Air Pollution Warning.
- Activate the preplanned abatement strategy listed in LAC 33.III.5611. Table 7 when the administrative authority declares an Air Pollution Emergency.
- Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency. Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33.III.5611. Tables 5, 6, and 7.
- Comply with the provisions in 40 CFR 68, except as specified in LAC 33.III.5901.
- Identify hazards that may result from accidental releases of the substances listed in 40 CFR 68.130, Table 59.0 of LAC 33.III.5907, or Table 59.10f LAC 33.III.5913 using appropriate hazard assessment techniques, design and maintain a safe facility, and minimize the off-site consequences of accidental releases of such substances that do occur.
- Submit amended registration: Due to the Office of Environmental Compliance within 60 days after the information in the submitted registration is no longer accurate.

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Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year unless otherwise directed. Submit emission inventory data in the format specified by the Office of Environmental Assessment. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A-D.

Report the unauthorized discharge of any air pollutant into the atmosphere in accordance with LAC 33:III. Chapter 39, Notification Regulations and Procedures for Unauthorized Discharges. Submit written reports to the department pursuant to LAC 33:1.3925. Submit timely and appropriate follow-up reports detailing methods and procedures to be used to prevent similar atmospheric releases.

CRG 0002 CFF - Control Fabric Filter

Group Members: RLP 1163 RLP 1174 RLP 1200 RLP 1202

Filter vents: Visible emissions monitored by visual inspection/determination daily. If visible emissions are observed, restore operation of the filter to its normal or usual manner of operation as expeditiously as practicable, but at a minimum within three working days, in accordance with good air pollution control practices for minimizing emissions.

Which Months: All Year Statistical Basis: None specified

Filter vents: Visible emissions recordkeeping by electronic or hard copy daily. Keep records of visible emission checks on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.

Particulate matter (10 microns or less) >= 99 % removal efficiency from filter manufacturer's certification.

Which Months: All Year Statistical Basis: None specified

Baghouses: Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of inspection. Keep records of maintenance inspections on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.

CRG 0003 LAC 33:III Chapter 13 - Emission Standards for PM Applicability (1311)

Group Members: RLP 1138 RLP 1139 RLP 1140 RLP 1141 RLP 1142 RLP 1143 RLP 1144 RLP 1145 RLP 1146 RLP 1147 RLP 1148 RLP 1149 RLP 1150 RLP 1151 RLP 1152 RLP 1153 RLP 1154 RLP 1155 RLP 1156 RLP 1157 RLP 1158 RLP 1159 RLP 1160 RLP 1161 RLP 1162 RLP 1163 RLP 1164 RLP 1165 RLP 1166 RLP 1167 RLP 1168 RLP 1169 RLP 1170 RLP 1171 RLP 1172 RLP 1173 RLP 1174 RLP 1175 RLP 1199 RLP 1200 RLP 1201 RLP 1202 RLP 1204 RLP 1205 RLP 1206 RLP 1207 RLP 1208

132 [LAC 33:III.131.1.B] Total suspended particulate <= 6.65 lb/hr. The rate of emission shall be the total of all emission points from the source.
 Which Months: All Year Statistical Basis: None specified

CRG 0004 LAC 33:III Chapter 21 - Storage of VOCs (2103)

Group Members: EQT 0988 EQT 0989 EQT 1001 EQT 1003 EQT 1005 EQT 1006 EQT 1004 EQT 1007 EQT 1008 EQT 1009 EQT 1010 EQT 1011 EQT 1012 EQT 1013 EQT 1014 EQT 1015 EQT 1016 EQT 1017 EQT 1018 EQT 1019

Equip tank, reservoir or other container with a submerged fill pipe or a vapor loss control system, as defined in LAC33:III.2103.E.
 133 [LAC 33:III.2103.A] Tank is equipped with a vapor loss control system, and emissions routed to the Flare EQT986, Emission Point 1022.

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CRG 0004 LAC 33:III Chapter 21 - Storage of VOCs (2103)

134 [LAC 33:III.2103.E.2] VOC, Total \geq 90 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.
 Emissions routed to the Flare EQT986 (Emission Point 1022).

Which Months: All Year Statistical Basis: None specified
 Determine VOC maximum true vapor pressure using the methods in LAC 33.III.2103.H.3.a-e.

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

EQT 0986 1022 : Blowdown Flare

Closed vent system: Design to collect all VOC vapors and gases discharged from the storage vessel. Subpart Kb. [40 CFR 60.112b(a)(3)(i)]
 VOC, Total \geq 95 % reduction efficiency. Subpart Kb. [40 CFR 60.112b(a)(3)(ii)]
 Which Months: All Year Statistical Basis: None specified

Meet the specifications described in the general control device requirements (40 CFR 60.18). Subpart Kb. [40 CFR 60.112b(a)(3)(iii)]
 Meet the requirements specified in the general control device requirements, 40 CFR 60.18(e) and (f). Subpart Kb. [40 CFR 60.113b(d)]

Submit report: Due to DEQ within six months of the initial startup date as required by 40 CFR 60.8. The report shall contain the measurements required by 40 CFR 60.18(f)(1) through (6). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(d)(1)]

Presence of a flame recordkeeping by electronic or hard copy upon each occurrence of operation during which the flare pilot flame is absent.
 Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(d)(2)]

Submit a report: Due semiannually to DEQ for all periods recorded under 40 CFR 60.115b(d)(2) in which the pilot flame was absent. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(d)(3)]

Design and operate for no visible emissions, as determined by the methods specified in 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any two consecutive hours. Subpart A. [40 CFR 60.18(c)(1)]

Operate with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f)(2). Subpart A. [40 CFR 60.18(c)(2)]
 Heat content \geq 300 BTU/scf (11.2 MJ/scm). Determine the net heating value of the gas being combusted by the methods specified in 40 CFR 60.18(f)(3). Subpart A. [40 CFR 60.18(c)(3)(ii)]

Which Months: All Year Statistical Basis: None specified
 Exit Velocity $<$ ft/sec (V_{max}). Determine V_{max} using the method specified in 40 CFR 60.18(f)(6). Subpart A. [40 CFR 60.18(c)(5)]

Which Months: All Year Statistical Basis: None specified
 Monitor flares to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how to monitor flares. Subpart A. [40 CFR 60.18(d)]

Operate at all times when emissions may be vented to the flare. Subpart A. [40 CFR 60.18(e)]
 Presence of a flame monitored by flame monitor continuously. Use a thermocouple or any other equivalent device to detect the presence of a flare pilot flame. Subpart A. [40 CFR 60.18(f)(2)]

Which Months: All Year Statistical Basis: None specified

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EQT 0986 1022 - Blowdown Flare

- 151 [40 CFR 60.19]
 152 [40 CFR 60.562-1(a)(1)(i)(C)]
 Comply with the applicable general notification and recordkeeping requirements. Subpart A.
 Combust the emissions in a flare that meets the requirements of 40 CFR 60.18. If the flare is used to control both continuous and intermittent emissions, the flare must meet conditions specified in 40 CFR 60.18 at all times. Subpart DDD. [40 CFR 60.562-1(a)(1)(i)(C)]
- 153 [40 CFR 60.562-1(a)(2)(i)]
 Combust the intermittent emissions in a flare that is designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours, operated with a flame present at all times, and designed to maintain a stable flame. Subpart DDD. [40 CFR 60.562-1(a)(2)(i)]
- 154 [40 CFR 60.562-1(d)]
 Closed Vent System: Operate all closed vent systems and control devices at all times when emissions may be vented to them. Subpart DDD.
 [40 CFR 60.562-1(d)]
- 155 [40 CFR 60.562-1(e)]
 Vent System: Ensure that valves that could divert a vent stream from a control device have car-sealed open all valves in the vent system from the emission source to the control device and car-sealed closed all valves in the vent system that would lead the vent stream to the atmosphere, either directly or indirectly, bypassing the control device. Subpart DDD. [40 CFR 60.562-1(e)]
- 156 [40 CFR 60.563(c)]
 Monitor control devices to ensure that they are operated and maintained in conformance with their designs. Subpart DDD. [40 CFR 60.563(c)]
- 157 [40 CFR 60.563]
 Presence of a flame monitored by flame monitor continuously. Install the flame monitoring device to indicate the presence of a flame at each pilot light. Monitor the presence of a flame using a device such as a thermocouple or equivalent monitoring device. Subpart DDD.
- 158 [40 CFR 60.564(a)(1)]
 Which Months: All Year Statistical Basis: None specified
 Conduct a performance test; whenever changes are made in production capacity, feedstock type or catalyst type, or whenever there is replacement, removal, or addition of a control device, in order to determine compliance with 40 CFR 60.562-1. Subpart DDD. [40 CFR 60.564(a)(1)]
- 159 [40 CFR 60.564(a)]
 Use the test methods in appendix A or other methods and procedures specified in 40 CFR 60.564, except as provided under 40 CFR 60.8(b) to conduct performance tests required in 40 CFR 60.8. Subpart DDD. [40 CFR 60.564(a)]
- 160 [40 CFR 60.565(b)(1)]
 Submit an engineering report describing in detail the vent system used to vent each affected vent stream to a control device. Include in this report all valves and vent pipes that could vent the stream to the atmosphere, thereby bypassing the control device, and identify which valves are car-sealed opened and which valves are car-sealed closed. Submit the report either with the initial performance test or, if complying with 40 CFR 60.562-1(a)(1)(D), as a separate report. Subpart DDD. [40 CFR 60.565(b)(1)]
- 161 [40 CFR 60.565(k)]
 Submit reports: Due semiannually. Submit the initial report within 6 months after the initial start-up date. Include the applicable information listed in 40 CFR 60.565(k)(1) through (7) to the DEQ if complying with the requirements of this subpart by complying with the uncontrolled threshold emission rate cutoff provision of 40 CFR 60.560 (d) and (e), the individual stream exemptions of 40 CFR 60.560(g), or the requirements of 40 CFR 60.562-1. Subpart DDD. [40 CFR 60.565(k)]
- 162 [40 CFR 60.565(l)]
 Submit Notification: Inform the DEQ with the specific provisions of 40 CFR 60.562, 40 CFR 60.560(d) or 40 CFR 60.560(e), as applicable with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.562 that the operator elects to comply with, or becomes subject to 40 CFR 60.562 for the first time. Conduct the performance test specified by 40 CFR 60.564 upon implementing a change. Subpart DDD. [40 CFR 60.565(l)]
- 163 [40 CFR 60.565]
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain up-to-date, readily-accessible records of the required information listed in 40 CFR 60.565(a) through (j) for at least two years. Subpart DDD.

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air - Title V Regular Permit Renewal

EQT 0986 1022 - Blowdown Flare

- 164 [LAC 33:III.1105] Opacity <= 20 percent, except for a combined total of six hours in any 10 consecutive day period, for burning in connection with pressure valve releases for control over process upsets.
 Which Months: All Year Statistical Basis: None specified
 Submit notification: Due to SPOC as soon as possible after the start of burning of pressure valve releases for control over process upsets.
- 165 [LAC 33:III.1105] Notify in accordance with LAC 33:III.3923. Notification is required only if the upset cannot be controlled in six hours.
- 166 [LAC 33:III.2115.A] Nonhalogenated hydrocarbon burning: Temperature \geq 1300 F (704 degrees C) for 0.3 second or greater in a direct-flame afterburner or an equally effective device which achieves a removal efficiency of 95 percent or greater, as determined in accordance with LAC 33:III.2115.J.1, or if emissions are reduced to 50 ppm by volume, whichever is less stringent.
- 167 [LAC 33:III.2115.I] Which Months: All Year Statistical Basis: None specified
 Determine compliance with LAC 33:III.2115.A through G by applying the test methods specified in LAC 33:III.2115.1 through 5, as appropriate.
- 168 [LAC 33:III.2115.J.] Demonstrate compliance with LAC 33:III.2115 as requested by DEQ.
- 169 [LAC 33:III.2115.J.2] Install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with design specifications. Monitor and record at a minimum the parameters listed in LAC 33:III.2115.J.2 through e.
- 170 [LAC 33:III.2115.J] Comply with LAC 33:III.2115 as soon as practicable but in no event later than August 20, 2003. Comply with the requirements of LAC 33:III.2115 as soon as practicable, but in no event later than one year from the promulgation of the regulation revision, if subject to LAC 33:III.2115 as a result of a revision of LAC 33:III.2115.
- 171 [LAC 33:III.2115.K] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain the records specified in LAC 33:III.2115.K.1 through K.3. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request.
- 172 [LAC 33:III.5107.A.2] Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.
- 173 [LAC 33:III.5107.A.2] Emiss Class III TAP only. Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

EQT 0992 C-1007 - Non-TAP Alkene Storage Bullet (C-1007)

- 174 [LAC 33:III.2103.B] Equip with a submerged fill pipe.
- 175 [LAC 33:III.2103.E.2] VOC, Total \geq 90 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.
 Which Months: All Year Statistical Basis: None specified
 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- 176 [LAC 33:III.2103.E] Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a.3.

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air - Title V Regular Permit Renewal

EQT 0992 C-1007 : Non-TAP Alkene Storage Bullet (C-1007)

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.1.1 - 7, as applicable.

EQT 0993 C-1008 : Non-TAP Alkene Storage Bullet (C-1008)

- 178 [LAC 33:III.2103.1] Equip with a submerged fill pipe.
 VOC, Total \geq 90 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.
 Which Months: All Year Statistical Basis: None specified
 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3-a-e.
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.1.1 - 7, as applicable.

EQT 0995 C-1027 - Column (C-1027)

- 184 [40 CFR 60.1-19] All affected stationary sources shall comply with applicable provisions of this subpart. Subpart A
 Vent stream is routed to the Flare, EQT986, Emission Point 1022.
 Combust the emissions in a flare that meets the requirements of 40 CFR 60.18. If the flare is used to control both continuous and intermittent emissions, the flare must meet conditions specified in 40 CFR 60.18 at all times. Subpart DDD. [40 CFR 60.562-1(a)(1)(i)(C)]
 Vent the emissions to a control device located on the plant site. Subpart DDD. [40 CFR 60.562-1(a)(1)(i)(D)]
 Use the procedures identified in 40 CFR 60.562-1(a)(1)(ii) and (iii) to determine which continuous emissions, from an affected facility as defined in 40 CFR 60.560(a)(1), are to be controlled and which level of control listed in 40 CFR 60.(a)(1)(i) is to be met. Subpart DDD. [40 CFR 60.562-1(a)(1)]
 Combust the intermittent emissions in a flare that is designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours, operated with a flame present at all times, and designed to maintain a stable flame. Subpart DDD. [40 CFR 60.562-1(a)(2)(i)]
 Vent System: Ensure that valves that could divert a vent stream from a control device have car-sealed open all valves in the vent system from the emission source to the control device and car-sealed closed all valves in the vent system that would lead the vent stream to the atmosphere, either directly or indirectly, bypassing the control device. Subpart DDD. [40 CFR 60.562-1(e)]
 Shall meet the applicable process emission standards of 40 CFR 60.562-1. Subpart DDD.
 Use the test methods in appendix A or other methods and procedures specified in 40 CFR 60.564, except as provided under 40 CFR 60.8(b) to conduct performance tests required in 40 CFR 60.8. Subpart DDD. [40 CFR 60.564(a)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air - Title V Regular Permit Renewal

EQT 0995 C-1027 : Column (C-1027)

- 192 [40 CFR 60.565(b)(1)] Submit an engineering report describing in detail the vent system used to vent each affected vent stream to a control device. Include in this report all valves and vent pipes that could vent the stream to the atmosphere, thereby bypassing the control device, and identify which valves are car-sealed opened and which valves are car-sealed closed. Submit the report either with the initial performance test or, if complying with 40 CFR 60.562-1(a)(1)(i)(D), as a separate report. Subpart DDD. [40 CFR 60.565(b)(1)]
- 193 [40 CFR 60.565(k)] Submit reports: Due semiannually. Submit the initial report within 6 months after the initial start-up date. Include the applicable information listed in 40 CFR 60.565(k)(1) through (7) to the DEQ if complying with the requirements of this subpart by complying with the uncontrolled threshold emission rate cutoff provision of 40 CFR 60.560 (d) and (e), the individual stream exemptions of 40 CFR 60.560(g), or the requirements of 40 CFR 60.562-1. Subpart DDD. [40 CFR 60.565(k)]
- 194 [40 CFR 60.565(l)] Submit Notification: Inform the DEQ with the specific provisions of 40 CFR 60.562, 40 CFR 60.560(d) or 40 CFR 60.560(e), as applicable with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.562 that the operator elects to comply with, or becomes subject to 40 CFR 60.562 for the first time. Conduct the performance test specified by 40 CFR 60.564 upon implementing a change. Subpart DDD. [40 CFR 60.565(l)]
- 195 [40 CFR 60.565] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain up-to-date, readily-accessible records of the required information listed in 40 CFR 60.565(a) through (l) for at least two years. Subpart DDD.

EQT 0998 C-1406 - Storage Bullet (C-1406)

- 196 [40 CFR 60.112(b)(3)(ii)] VOC, Total \geq 95 % reduction efficiency using a closed vent system and control device. Subpart Kb. [40 CFR 60.112(b)(a)(3)(iii)] Which Months: All Year Statistical Basis: None specified
- 197 [40 CFR 60.112(b)(3)] Equip with a closed vent system to collect all VOC vapors and gases discharged from the storage vessel and operate with no detectable emissions. Subpart Kb. [40 CFR 60.112(b)(a)(3)]
- 198 [40 CFR 60.116(b)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Keep copies of all records for the life of the source as specified by 40 CFR 60.116(b)(a). Subpart Kb. [40 CFR 60.116(b)]
- 199 [40 CFR 60.116(b)(c)] VOC storage data recordkeeping by electronic or hard copy at the approved frequency. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116(b)(c)]
- 200 [LAC 33.III.2|03.B] Equip with a submerged fill pipe.
- 201 [LAC 33.III.2|03.E.] VOC, Total \geq 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.
- 202 [LAC 33.III.2|03.E] Which Months: All Year Statistical Basis: None specified
- 203 [LAC 33.III.2|03.H.3] Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- Determine VOC maximum true vapor pressure using the methods in LAC 33.III.2|03.H.3.a-e.

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air - Title V Regular Permit Renewal

EQT 099B C-1406 - Storage Bullet (C-1406)

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

EQT 1000 C-1447 - Column (C-1447)

- 205 [40 CFR 60.562-1(a)(1)(i)(A)] Total Organic Compounds (less methane and ethane) $\geq 98\%$ reduction by weight, or to a TOC (less methane and ethane) concentration of 20 ppmv on a dry basis, whichever is less stringent. The TOC is expressed as the sum of the actual compounds, not the carbon equivalents. If electing to comply with the 20 ppmv standard, include a correction to 3 percent oxygen only when supplemental combustion air is used to combust the vent. Subpart DDD. [40 CFR 60.562-1(a)(i)(A)]
- Which Months: All Year Statistical Basis: None specified
- Combust the emissions in a flare that meets the requirements of 40 CFR 60.18. If the flare is used to control both continuous and intermittent emissions, the flare must meet conditions specified in 40 CFR 60.18 at all times. Subpart DDD. [40 CFR 60.562-1(a)(i)(C)]
- Vent the emissions to a control device located on the plant site. Subpart DDD. [40 CFR 60.562-1(a)(i)(D)]
- Use the procedures identified in 40 CFR 60.562-1(a)(1)(ii) and (iii) to determine which continuous emissions, from an affected facility as defined in 40 CFR 60.560(a)(1), are to be controlled and which level of control listed in 40 CFR 60.(a)(1)(i) is to be met. Subpart DDD. [40 CFR 60.562-1(a)(1)]
- Combust the intermittent emissions in a flare that is designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours, operated with a flame present at all times, and designed to maintain a stable flame. Subpart DDD. [40 CFR 60.562-1(a)(2)(i)]
- Conduct a performance test, whenever changes are made in production capacity, feedstock type or catalyst type, or whenever there is replacement, removal, or addition of a control device, in order to determine compliance with 40 CFR 60.562-1. Subpart DDD. [40 CFR 60.564(a)(1)]
- Use the test methods in appendix A or other methods and procedures specified in 40 CFR 60.564, except as provided under 40 CFR 60.8(b) to conduct performance tests required in 40 CFR 60.8. Subpart DDD. [40 CFR 60.564(a)]
- Submit reports: Due semiannually. Submit the initial report within 6 months after the initial start-up date. Include the applicable information listed in 40 CFR 60.565(k)(1) through (7) to the DEQ if complying with the requirements of this subpart by complying with the uncontrolled threshold emission rate cutoff provision of 40 CFR 60.560 (d) and (e), the individual stream exemptions of 40 CFR 60.560(g), or the requirements of 40 CFR 60.562-1. Subpart DDD. [40 CFR 60.565(k)]
- Submit Notification: Inform the DEQ with the specific provisions of 40 CFR 60.562, 40 CFR 60.560(d) or 40 CFR 60.560(e), as applicable with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.562 that the operator elects to comply with, or becomes subject to 40 CFR 60.562 for the first time. Conduct the performance test specified by 40 CFR 60.564 upon implementing a change. Subpart DDD. [40 CFR 60.565(l)]
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain up-to-date, readily-accessible records of the required information listed in 40 CFR 60.565(a) through (l) for at least two years. Subpart DDD.

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air - Title V Regular Permit Renewal

EQT 1002 C-1409 - Non-TAP Alkene Storage Tank (C-1409)

- 215 [40 CFR 60.112(b)(a)(3)(ii)] VOC, Total $\geq 95\%$ reduction efficiency using a closed vent system and control device. Subpart Kb. [40 CFR 60.112(b)(a)(3)(ii)]
 Which Months: All Year Statistical Basis: None specified
 Equip with a closed vent system and control device. Design the closed vent system to collect all VOC vapors and gases discharged from the storage vessel and operate with no detectable emissions. Subpart Kb. [40 CFR 60.112(b)(a)(3)]
 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Keep copies of all records for the life of the source as specified by 40 CFR 60.116(k). Subpart Kb. [40 CFR 60.116(b)(b)]
 VOL storage data recordkeeping by electronic or hard copy at the approved frequency. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116(b)(c)]
 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
 Tank vents to a flare.
- 216 [40 CFR 60.112(b)(a)(3)] VOC, Total $\geq 95\%$ control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.
 Which Months: All Year Statistical Basis: None specified
 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

FUG 0021 1014 - No.1 Compressor Seal Vent

- 220 [LAC 33:III.2103.E.1] Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.

FUG 0022 1015 - No.2 Compressor Seal Vent

- 221 [LAC 33:III.2103.H.3]
 222 [LAC 33:III.2103.I] Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.

FUG 0023 1036 - Fugitive Emissions

- 225 [LAC 33:III.2111] Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.
 Repair according to LAC 33:III.2121.B.3 any regulated component observed leaking by sight, sound, or smell, regardless of the leak's concentration.
- 226 [LAC 33:III.2121.B.1]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp : St Charles Operations
Activity Number: PER20080010
Permit Number: 2350-V4
Air - Title V Regular Permit Renewal

FUG_0023 1036 - Fugitive Emissions

- 227 [LAC 33:III.2|21.B.2] Do not locate any valve, except safety pressure relief valves, valves on sample lines, valves on drain lines and valves that can be removed and replaced without a shutdown, at the end of a pipe or line containing VOC unless the end of such line is sealed with a second valve, a blind flange, a plug, or a cap. Remove such sealing devices only when the line is in use, for example, when a sample is being taken. When the line has been used and is subsequently resealed, close the upstream valve first, followed by the sealing device.
- 228 [LAC 33:III.2|21.B.3] Make every reasonable effort to repair a leaking component, as described in LAC 33:III.2|21.B, within 15 days, except as provided.
- 229 [LAC 33:III.2|21.C.1.a.i] Pump seals: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 annually (one time per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2|21.B.3.
- 230 [LAC 33:III.2|21.C.1.a.ii] Which Months: All Year Statistical Basis: None specified Valves in liquid service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 annually (one time per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2|21.B.3.
- 231 [LAC 33:III.2|21.C.1.a.iii] Which Months: All Year Statistical Basis: None specified Process drains: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 annually (one time per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2|21.B.3.
- 232 [LAC 33:III.2|21.C.1.b.i] Which Months: All Year Statistical Basis: None specified Compressor seals: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2|21.B.3.
- 233 [LAC 33:III.2|21.C.1.b.ii] Which Months: All Year Statistical Basis: None specified Valves in gas service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2|21.B.3. Permittee may elect to comply with the alternate standards for valves in LAC 33:III.2|21.D (skip period provisions).
- 234 [LAC 33:III.2|21.C.1.b.iii] Which Months: All Year Statistical Basis: None specified Pressure relief valves in gas service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2|21.B.3.
- 235 [LAC 33:III.2|21.C.1.b.iv] Which Months: All Year Statistical Basis: None specified Valves in light liquid service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2|21.B.3. Permittee may elect to comply with the alternate standards for valves in LAC 33:III.2|21.D (skip period provisions).
- 236 [LAC 33:III.2|21.C.1.b.v] Which Months: All Year Statistical Basis: None specified Pumps in light liquid service: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 quarterly (four times per year). If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33:III.2|21.B.3. Permittee may elect to comply with the alternate standards for valves in LAC 33:III.2|21.D (skip period provisions).
- 237 [LAC 33:III.2|21.C.1.c] Which Months: All Year Statistical Basis: None specified Pumps: Seal or closure mechanism monitored by visual inspection/determination weekly (52 times per year).

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air - Title V Regular Permit Renewal

FUG 0023 1036 - Fugitive Emissions

Pressure relief valves: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 within 24 hours after venting to the atmosphere. If a reading of 10,000 ppmv or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in LAC 33.III.2121.B.3.

Which Months: All Year Statistical Basis: None specified
 All components: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 upon each occurrence of a leak detected by sight, smell, or sound, unless electing to implement actions as specified in LAC 33.III.2121.B.3.

Which Months: All Year Statistical Basis: None specified
 Unsafe-to-monitor valves: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 upon each occurrence of conditions allowing these valves to be monitored safely.

Which Months: All Year Statistical Basis: None specified
 Inaccessible valves: VOC, Total monitored by 40 CFR 60, Appendix A, Method 21 annually (at a minimum).
 Comply with alternate control techniques as applicable.

When a leak that cannot be repaired on-line and in-place is located, affix to the leaking component a weatherproof and readily visible tag bearing an identification number and the date the leak is located. Date and remove the tag after the leak is repaired.

Equipment/operational data recordkeeping by survey log upon each occurrence of a leak. Include the leaking component information specified in LAC 33.III.2121.E.2. Retain the survey log for two years after the latter date specified in LAC 33.III.2121.E.2 and make said log available to DEQ upon request.

Submit report: Due semiannually, by the 31st of January and July, to the Office of Environmental Assessment. Include the information specified in LAC 33.III.2121.F.1 through 4 for each calendar quarter during the reporting period.

Emit Class III TAP only. Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33.III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33.III.5105.B.
 Include emissions of all toxic air pollutants listed in LAC 33.III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33.III.5105.B.

GRP 0011 1005 CAP : R-9 Dehydrator Vent CAP

Group Members: RLP 1138 RLP 1139

248 [LAC 33.III.501.C.6]

Permittee shall show compliance with the limits of this permit by maintaining the total overall calculated PM10 emissions (cap) from Emission Points 1005A and 1005B, to not more than 0.66 TPY of PM10. These total calculated PM10 emissions shall be reported under a cap, Emission Point 1005 CAP. These PM10 emissions from 1005 CAP shall be calculated and recorded each month, as well as the total PM10 emissions calculated for the last twelve months. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. Total overall calculated PM10 emissions from this equipment above the maximum listed in this specific condition for any twelve consecutive month period shall be a violation of this permit and must be reported to the Office of Environmental Compliance, Enforcement Division.

SPECIFIC REQUIREMENTS

AJ ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air : Title V Regular Permit Renewal

GRP 0158 Unloading CAP - Unloading System Vent CAP

Group Members: RLP 1159 RLP 1160

249 [LAC 33:III.501.C.6]

Permittee shall show compliance with the limits of this permit by maintaining the total overall hours of operation and overall calculated PM10 emissions (cap) from Emission Points 1042 and 1043 to not more than 0.35 TPY of PM10. These total calculated PM10 emissions shall be reported under a cap, Emission Point UNLOADING CAP. These PM10 emissions from UNLOADING CAP shall be calculated and recorded each month, as well as the total PM10 emissions calculated for the last twelve months. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. Total overall calculated PM10 emissions from this equipment above the maximum listed in this specific condition for any twelve consecutive month period shall be a violation of this permit and must be reported to the Office of Environmental Compliance, Enforcement Division.

GRP 0159 Hopper CAP : Hopper Car Vent CAP

Group Members: RLP 1161 RLP 1162

250 [LAC 33:III.501.C.6]

Permittee shall show compliance with the limits of this permit by maintaining the total overall calculated PM10 emissions (cap) from Emission Points 1046 and 1047, to not more than 0.01 TPY of PM10. These total calculated PM10 emissions shall be reported under a cap, Emission Point Hopper CAP. These PM10 emissions from Hopper CAP shall be calculated and recorded each month, as well as the total PM10 emissions calculated for the last twelve months. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. Total overall calculated PM10 emissions from these equipment above the maximum listed in this specific condition for any twelve consecutive month period shall be a violation of this permit and must be reported to the Office of Environmental Compliance, Enforcement Division.

GRP 0160 Loading CAP - Loading System Vent CAP

Group Members: RLP 1152 RLP 1153 RLP 1154 RLP 1155 RLP 1156 RLP 1157 RLP 1158 RLP 1159 RLP 1160 RLP 1161 RLP 1162

251 [LAC 33:III.501.C.6]

Submit report: Due annually, by the 31st of March. Report the total production rate for the preceding calendar year to the Office of Environmental Compliance, Enforcement Division.

Production rate recordkeeping by electronic or hard copy monthly. Keep records of the total production rate for each month, as well as the production rate for the last twelve months. Make records available for inspection by DEQ personnel.

Production rate <= 1200 MM lbs/yr. Noncompliance with this limitation is a reportable violation of the Permit. Notify the Office of Environmental Compliance, Enforcement Division if production rate exceeds the maximum listed in this specific condition for any twelve consecutive month period.

Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AJ ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air - Title V Regular Permit Renewal

GRP 0160 Loading CAP - Loading System Vent CAP

254 [LAC 33:III.501.C.6]

Permittee shall show compliance with the limits of this permit by maintaining the total overall calculated PM10 and VOC emissions (cap) from Emission Points 1028, 1029, 1030, 1031, 1053, 1054, and 1067, to not more than 15.31 TPY of PM10 and 66.0 TPY of VOC. These total calculated PM10 and VOC emissions shall be reported under a cap, Emission Point LOADING CAP. These PM10 and VOC emissions from LOADING CAP shall be calculated and recorded each month, as well as the total PM10 and VOC emissions calculated for the last twelve months. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. Total overall calculated PM10 and VOC emissions from these equipment above the maxima listed in this specific condition for any twelve consecutive month period shall be a violation of this permit and must be reported to the Office of Environmental Compliance, Enforcement Division.

255 [LAC 33:III.501.C.6]

Production rate monitored by technically sound method during loading
 Which Months: All Year Statistical Basis: None specified

GRP 0161 TB CAP - Trim Bin Vent CAP

Group Members: RLP 1166 RLP 1167

256 [LAC 33:III.501.C.6]

Permittee shall show compliance with the limits of this permit by maintaining the total overall calculated PM10 emissions (cap) from Emission Points 1055 and 1056, to not more than 1.82 TPY of PM10. These total calculated PM10 emissions shall be reported under a cap, Emission Point TB CAP. These PM10 emissions from TB CAP shall be calculated and recorded each month, as well as the total PM10 emissions calculated for the last twelve months. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. Total overall calculated PM10 emissions from these equipment above the maximum listed in this specific condition for any twelve consecutive month period shall be a violation of this permit and must be reported to the Office of Environmental Compliance, Enforcement Division.

GRP 0162 SB CAP - Storage Bin Vent CAP

Group Members: RLP 1159 RLP 1160 RLP 1161 RLP 1162

257 [LAC 33:III.501.C.6]

Permittee shall show compliance with the limits of this permit by maintaining the total overall calculated PM10 emissions (cap) from Emission Points 1059, 1060, 1061, and 1062, to not more than 0.67 TPY of PM10. These total calculated PM10 emissions shall be reported under a cap, Emission Point SB CAP. These PM10 emissions from SB CAP shall be calculated and recorded each month, as well as the total PM10 emissions calculated for the last twelve months. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. Total overall calculated PM10 emissions from these equipment above the maximum listed in this specific condition for any twelve consecutive month period shall be a violation of this permit and must be reported to the Office of Environmental Compliance, Enforcement Division.

GRP 0163 Scrubber CAP - Activator Scrubber Vent CAP

Group Members: RLP 1105 RLP 1108

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air - Title V Regular Permit Renewal

GRP 0163 Scrubber CAP - Activator Scrubber Vent CAP

258 [LAC 33:III.501.C.6]

Permittee shall show compliance with the limits of this permit by maintaining the total overall calculated emissions (cap) from Emission Points 1078 and 1083, to not more than 0.62TPY PM10, 0.01 TPY NOx, 0.07 TPY CO, 2.17 TPY VOC, and 0.01 TPY Ammonia. These total calculated PM10, NOX, CO, VOC, and Ammonia emissions shall be reported under a cap, Emission Point SCRUBBER CAP. These emissions from SCRUBBER CAP shall be calculated and recorded each month, as well as the total PM10, NOX, CO, VOC, and Ammonia emissions calculated for the last twelve months. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. Total overall calculated PM10, NOX, CO, VOC, and Ammonia emissions from these equipment above the maxima listed in this specific condition for any twelve consecutive month period shall be a violation of this permit and must be reported to the Office of Environmental Compliance, Enforcement Division.

RLP 1141 1007 - Reduction Blow Tank Vent

259 [LAC 33:III.1305]

Prevent particulate matter from becoming airborne by taking all reasonable precautions. These precautions shall include, but not be limited to, those specified in LAC 33:III.1305.A.1-7.

260 [LAC 33:III.1311.B]

Total suspended particulate <= 0.002 lb/hr. The rate of emission shall be the total of all emission points from the source.

261 [LAC 33:III.1311.C]

Which Months: All Year Statistical Basis: None specified

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

RLP 1205 1078 - Activator Scrubber Vent

262 [LAC 33:III.5107.A.2]

Emits Class III TAP only. Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

263 [LAC 33:III.5107.A.2]

Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

RLP 1208 1083 - Secondary Activator Scrubber Vent

264 [LAC 33:III.5107.A.2]

Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

265 [LAC 33:III.5107.A.2]

Emits Class III TAP only. Chapter 51 MACT is not required. Include emissions of all toxic air pollutants listed in LAC 33:III.5112, Table 51.1 or 51.3 in the Annual Emissions Report unless exempted under LAC 33:III.5105.B.

UNF 0012 LP-3 - Polyethylene Plant

266 [40 CFR 60.560-566]

Comply with all applicable provision for 40 CFR 60 Subpart DDD.

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air - Title V Regular Permit Renewal

UNF 0012 LP-3 : Polyethylene Plant

- Permittee shall meet the applicable process emissions standards of 40 CFR 562-1. Subpart DDD.
- Submit reports: Due semiannually. Submit the initial report within 6 months after the initial start-up date. Include the applicable information listed in 40 CFR 60.565(k)(1) through (7) to the DEQ if complying with the requirements of this subpart by complying with the uncontrolled threshold emission rate cutoff provision of 40 CFR 60.560 (d) and (e), the individual stream exemptions of 40 CFR 60.560(g), or the requirements of 40 CFR 60.565(k).
- Submit Notification: Inform the DEQ with the specific provisions of 40 CFR 60.562, 40 CFR 60.560(d) or 40 CFR 60.560(e), as applicable with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.562 that the operator elects to comply with, or becomes subject to 40 CFR 60.562 for the first time. Conduct the performance test specified by 40 CFR 60.564 upon implementing a change. Subpart DDD. [40 CFR 60.565(l)]
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain up-to-date, readily-accessible records of the required information listed in 40 CFR 60.565(a) through (j) for at least two years. Subpart DDD.
- All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A.
- All affected facilities shall comply with all applicable provisions in 40 CFR 61 Subpart A.
- Submit Title V permit application for renewal: Due 6 months before permit expiration date. [40 CFR 70.5(a)(1)(iii)]
- Submit Title V monitoring results report: Due semiannually, by March 31st and September 30th for the preceding periods encompassing July through December and January through June, respectively. Submit reports to the Office of Environmental Compliance, Surveillance Division. Certify reports by a responsible company official. Clearly identify all instances of deviations from permitted monitoring requirements. For previously reported deviations, in lieu of attaching the individual deviation reports, clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. [40 CFR 70.6(a)(3)(iii)(A)]
- Submit Title V excess emissions report: Due quarterly, by June 30, September 30, December 31, March 31. Submit reports of all permit deviations to the Office of Environmental Compliance, Surveillance Division. Certify all reports by a responsible official in accordance with 40 CFR 70.5(c). The reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by 40 CFR 70.6(a)(3)(iii)(A) as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. [40 CFR 70.6(a)(3)(iii)(B)]
- Submit Title V compliance certification: Due annually, by the 31st of March. Submit to the Office of Environmental Compliance, Surveillance Division. [40 CFR 70.6(c)(5)(iv)]
- Permittee shall comply with the Part 70 General Conditions as set forth in LAC 33:III.535 and the Louisiana General Conditions as set forth in LAC 33:III.537. [LAC 33:III.535, LAC 33:III.537]
- Install air pollution control facilities whenever practically, economically, and technologically feasible. When facilities have been installed on a property, use them and diligently maintain them in proper working order whenever any emissions are being made which can be controlled by the facilities, even though the ambient air quality standards in affected areas are not exceeded.

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER20080010

Permit Number: 2350-V4

Air - Title V Regular Permit Renewal

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
Polyethylene Plant															
EQT 0984 1001															
EQT 0986 1022	49.01	605.56	214.68	9.28	120.40	40.65	0.18	2.11	0.77	0.04	0.37	0.16	8.39	103.11	36.74
FUG 0021 1014															
FUG 0022 1015															
FUG 0023 1036	<0.001	<0.01	<0.01	<0.001	<0.001	<0.01							5.11	5.11	22.36
GRP 0011 1005 CAP															
GRP 0158 Unloading CAP															
GRP 0159 Hopper CAP															
GRP 0160 Loading CAP															
GRP 0161 TB CAP															
GRP 0162 SB CAP															
GRP 0163 Scrubber CAP	0.03	0.07	0.004		0.01	0.004		0.22	0.15		0.62	0.15	0.77	2.17	
RLP 1138 1005A															
RLP 1139 1005B															
RLP 1140 1006															
RLP 1141 1007															
RLP 1142 1008															
RLP 1143 1012															
RLP 1144 1016															
RLP 1145 1017															
RLP 1146 1018															
RLP 1147 1019															
RLP 1148 1020															

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER20080010
 Permit Number: 2350-V4
 Air - Title V Regular Permit Renewal

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
Polyethylene Plant															
RLP 1149 1021							0.004	0.004	<0.01						
RLP 1150 1028							0.04	0.04	0.17						
RLP 1151 1027							0.04	0.04	0.17						
RLP 1152 1028							1.63								
RLP 1153 1029							1.63								
RLP 1154 1030							0.02								
RLP 1155 1031							0.02								
RLP 1156 1032							0.53	0.53	0.03						
RLP 1157 1035							0.2	0.2	0.6						
RLP 1158 1039							0.17	0.17	0.14						
RLP 1159 1042							0.08								
RLP 1160 1043							0.08								
RLP 1161 1046							0.09								
RLP 1162 1047							0.09								
RLP 1163 1052							0.03	0.03	0.11						
RLP 1164 1053							1.31								
RLP 1165 1054							1.31								
RLP 1166 1055							0.80								
RLP 1167 1056							0.80								
RLP 1168 1057							0.01	0.01	0.02						
RLP 1169 1059							0.08								
RLP 1170 1060							0.08								
RLP 1171 1061							0.08								

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER20080010

Permit Number: 2350-V4

Air - Title V Regular Permit Renewal

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
Polyethylene Plant															
RLP 1172 1082							0.08								
RLP 1173 1083							0.03	0.03	0.12						
RLP 1174 1084							0.01	0.01	0.05						
RLP 1175 1085							0.06	0.06	2.63						
RLP 1189 1086							0.06	0.06	2.63						
RLP 1200 1087							0.85								
RLP 1201 1088							<0.001	<0.001	<0.01						
RLP 1202 1072							0.04	0.04	0.17						
RLP 1203 1076							0.31	0.31	1.35						
RLP 1204 1077							0.04	0.04	0.01						
RLP 1205 1078		0.03			0.004			0.22							0.77
RLP 1206 1079							0.09	0.09	0.01						
RLP 1207 1080							0.06	0.06	0.01				0.01	0.30	0.02
RLP 1208 1083	0.03			0.004			0.22								0.77

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote.

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER20080010

Permit Number: 2350-V4

Air - Title V Regular Permit Renewal

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0986 1022	Ammonia	0.004	0.004	<0.01
FUG 0023 1036	Ammonia	<0.001	<0.001	<0.01
	Ethylene glycol	0.06	0.06	0.26
GRP 0163 Scrubber CAP	Ammonia	0.003		0.01
RLP 1205 1078	Ammonia		0.003	
RLP 1208 1083	Ammonia		0.003	

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

General Information

AI ID: 2083 Union Carbide Corp - St Charles Operations
Activity Number: PER20080010
Permit Number: 2350-V4
Air - Title V Regular Permit Renewal

Also Known As:	ID	Name	User Group	Start Date
2520-00001		Union Carbide Corp - Taft Star Plant	CDS Number	01-03-1990
13-1421730		Federal Tax ID	Federal Tax ID	11-21-1999
LADD041581422		Union Carbide Corp SCO Taft/Star	Hazardous Waste Notification	08-18-1980
PMT/PC		GPRA Baselines	Hazardous Waste Permitting	10-01-1997
LADD041581422		Union Carbide	Inactive & Abandoned Sites	06-08-1981
LA00000191		LPDES #	LPDES Permit #	05-22-2003
LAR10C313		LPDES #	LPDES Permit #	12-12-2004
LAR10C447		LPDES #	LPDES Permit #	12-12-2004
50152		ORIS Code	ORIS Code	09-16-2008
		Priority 1 Emergency Site	Priority 1 Emergency Site	07-18-2006
		Radioactive Material License	Radiation License Number	07-06-2001
		X-Ray Registration Number	Radiation X-ray Registration Number	11-21-1999
		Site ID #	Solid Waste Facility No.	04-30-2001
GD-089-1324		Union Carbide Chemicals & Plastics	TEMPO Merge	10-17-2001
17809		Dow Union Carbide - St Charles Operations	TEMPO Merge	06-30-2002
19135		Union Carbide Corp - Hahnville Plant	TEMPO Merge	10-17-2001
34610		Union Carbide Corp - Star Plant	TEMPO Merge	07-15-2001
36033		Union Carbide Corp	TEMPO Merge	11-01-2000
36332		Union Carbide Corp	TEMPO Merge	07-15-2001
38779		Union Carbide Corp	TEMPO Merge	07-15-2001
38780		Union Carbide Corp	TEMPO Merge	07-15-2001
38882		Union Carbide Corp	TEMPO Merge	07-15-2001
44903		Union Carbide Corp Taft Plant	TEMPO Merge	07-22-2001
45881		Union Carbide Chemical & Plastics	TEMPO Merge	07-22-2001
8533		Union Carbide	TEMPO Merge	09-05-2001
86428		Dow Chemical	TEMPO Merge	11-07-2001
9651		Union Carbide Star	TEMPO Merge	10-17-2001
70057NNCRBHWY31		TRI #	Toxic Release Inventory	07-30-2004
45011610		UST Facility ID (from UST legacy data)	UST FID #	10-12-2002

Main Phone: 9857834411

355 Hwy 3142 Gate 28
Taft, LA 700570050

Physical Location:

PO Box 50
Hahnville, LA 700570050

Mailing Address:

General Information

AI ID: 2083 Union Carbide Corp - St Charles Operations

Activity Number: PER20080010

Permit Number: 2350-V4

Air - Title V Regular Permit Renewal

Location of Front Gate: 29.982289 latitude, -90.455622 longitude, Coordinate Method: Lat/long. - DMS, Coordinate Datum: NAD83

Related People:		Name	Mailing Address	Phone (Type)	Relationship
Tim Brady		Tim Brady	PO Box 50 Hahnville, LA 700570050	9857834813 (WP)	Emission Inventory Contact for
Emergency Operations Center		PO Box 50 Hahnville, LA 700570050	BRADYTD@DOW.C	Emission Inventory Contact for	
Percy Gasery		PO Box 50 Hahnville, LA 70057	9857834387 (WP)	Katrina Response Contact for	
Percy Gasery		PO Box 50 Hahnville, LA 700570050	9857834315 (WP)	Radiation Safety Officer for	
Eric Kilian		PO Box 50 Hahnville, LA 700570050	9857834315 (WP)	Radiation Contact For	
Eric Kilian		PO Box 50 Hahnville, LA 700570050	9857834241 (WP)	Accident Prevention Billing Party for	
Responsible Care Leader		PO Box 50 Hahnville, LA 700570050	9857835423 (WF)	Accident Prevention Billing Party for	
Responsible Care Leader		PO Box 50 Hahnville, LA 700570050	985783411 (WP)	Air Permit Contact For	
Sarah Thigpen		PO Box 50 Hahnville, LA 700570050	985783411 (WP)	Responsible Official for	
Sarah Thigpen		PO Box 50 Hahnville, LA 700570050	9857835423 (WF)	Accident Prevention Contact for	
Sarah Thigpen		PO Box 50 Hahnville, LA 700570050	thigpesb@dow.com	Accident Prevention Contact for	
Sarah Thigpen		PO Box 50 Hahnville, LA 700570050	9857835835 (WP)	Accident Prevention Contact for	
Related Organizations:		Name	Address	Phone (Type)	Relationship
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857834387 (WP)	Operates	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857833454 (WF)	Emission Inventory Billing Party	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857834387 (WP)	Owns	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857833454 (WF)	Owns	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857834387 (WP)	Radiation Registration Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857833454 (WF)	Radiation Registration Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857834387 (WP)	Water Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857833454 (WF)	Water Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857834387 (WP)	Air Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857833454 (WF)	Air Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857834387 (WP)	Solid Waste Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857833454 (WF)	Solid Waste Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857834387 (WP)	Radiation License Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857833454 (WF)	Radiation License Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857834387 (WP)	Accident Prevention Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857833454 (WF)	Accident Prevention Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857834387 (WP)	UST Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857833454 (WF)	UST Billing Party for	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857834387 (WP)	Emission Inventory Billing Party	
Union Carbide Corp		PO Box 50 Hahnville, LA 700570050	9857833454 (WF)	Operates	

General Information

AI ID: 2083 Union Carbide Corp - St Charles Operations
Activity Number: PER20080010
Permit Number: 2350-V4
Air - Title V Regular Permit Renewal

NAIC Codes: 325110; Petrochemical Manufacturing

Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Ms. Tommie Millam, Permit Support Services Division, at (225) 219-3259 or email your changes to facupdate@a.a.gov.